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## **Nunisco Resources Limited**

# Richardson Township Project Diamond Drilling Report

(March, 1996)

Rainy River District Kenora Mining Division

> NTS 52 C/13 NTS 52 D/16



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## **Pocket**

1 1

-	Diamond Drill He	ole Cross Sections

NR-96-12
NR-96-13
NR-96-14
NR-96-15
NR-96-16
NR-96-17
NR-96-18
NR-96-19

#### 1.<sup>0</sup> Introduction

Nuinsco Resources Limited initiated a comprehensive exploration program in the Rainy River area following the release of results generated from a Canada - Ontario Mineral Development Agreement (COMDA) sponsored overburden drilling and sampling program. The government sponsored program identified several sample sites where glacial till was encountered with elevated gold grain content near bedrock in the Rainy River region. Of particular note were samples obtained from Richardson Township which included two boreholes with till intersections containing 202 and 54 gold grains. A particularly significant physical characteristic of these gold grains is the abundance of grains defined as pristine/delicate, an indication of minimal transport from bedrock source.

The impetus of the results of the program described above gave Nuinsco cause to examine other factors pertaining to the desireability of obtaining property in the region. Factors considered include:

i) The presence of an anomalous number of gold grains in near bedrock tills and their apparent proximity to a bedrock source.

ii) The discovery in 1991 of gold mineralization in quartz veins in Menary Township.

iii) The limited previous exploration in the region, particularly within bedrock.

iv) Areally extensive and often thick deposits of glacial debris which can provide an excellent medium in which to trace glacially derived dispersal trains from buried bedrock sources.

v) The interpreted nearby presence of the Quetico Fault, a regional deformation zone with which gold mineralization is spatially associated in the Mine Centre area.

vi) In Richardson Township particularly, but elsewhere also, the presence of a lithological transition from a lower tholeiitic mafic metavolcanic succession to a conformably overlying felsic-intermediate metavolcanic assemblage.

vii) The interpreted (from LANDSAT imagery) and locally observed, presence of shear zones transecting metavolcanic stratigraphy.

viii) The abundance of sulphide mineralization within the felsic-intermediate metavolcanic rocks in Richardson Township, and the comon anomalous gold values from these units (with respect to the average gold values expected from such units).

A number of these factors combine to indicate that potential exists for the presence of buried, possibly structurally hosted, gold mineralization in the region. It is this thesis which the Nuinsco Resources exploration program is testing.

This report describes the results of one component of the Nuinsco exploration program, namely diamond drilling conducted in Richardson Township in March of 1996. This drilling comprises drill holes NR-96-12 through NR-96-20 inclusive, a total of 2169.<sup>41</sup>m. The holes were drilled to test diverse targets and stratigraphy in south Richardson Township, and the results are reported here for assessment purposes.



Nuinsco Resources Limited RAINY RIVER GOLD PROJECT REGIONAL LOCATION MAP

#### 2.0 Location and Access

The accumulated claims and options comprising the Rainy River Project property are located in northwestern Ontario in the Ministry of Natural Resources Administrative District of Rainy River, Kenora Mining Division. The area is located near both the border with Manitoba and the international boundary with Minnesota. The nearest population centre is Fort Frances, 50 km to the southeast; the villages of Emo and Nestor Falls are about 25km to the south and north respectively. The claim group is encompassed approximately by latitudes 48° 45'N to 49° 00'N and longitudes 93° 46'W and 94° 36'W. The property area is covered by N.T.S. maps 52 C/13 and 52 D/16. Nuinsco Reources Cameron Lake Mine is located approximately 40km to the northeast.

The Nuinsco Resources accumulated land position consists of a series of discontinuous blocks lying in an arcuate east-west band of some 60km length. The claimed ground is predominantly underlain by metavolcanic-metasedimentary terrain located approximately between the contact of the Sabaskong Batholith to the north, the Rainy River Batholthic Complex and other subordinate intrusions in the east and the interpreted location of the Quetico Fault to the south. The land position is located in the townships of Senn, Menary, Potts, Richardson, Tait, Sifton, Patullo, Nelles, Blue, Pratt, Spohn, and Attwood and Curran.

Access to most of the claim group is attained via the numerous all weather, secondary, provincial highways (gravel) and township roads which lead off of paved highways 11 and 71 and which traverse the region and provide excellent ingress to claims in the west and centre of the property area. Claims comprising the northeast component of the property group can be accessed by a combination of logging roads, provincial and township roads and for the most inaccessible claims in Menary Township, by boat or snowmachine.



#### 3.<sup>0</sup> Physiography

The Rainy River region is located within the Severn Upland of the Canadian Shield (Bostock, 1970). Generally the Precambrian surface, and the overlying Palaeozoic and Mesozoic strata to the west, dips at a very low angle to the southwest into the Williston Basin (Bajc, 1991).

Physiographically the landscape on which the Nuinsco claim groups are situated can be divided into two distinct domains separated by a sharp northwest-southeast trending break - the site of the Rainy Lake -Lake of the Woods Moraine, which locally traverses Rowe, Menary, Potts, and Fleming townships.

To the north and east of the moraine in the Beadle Lake and Off Lake - Burditt Lake areas, a Precambrian highland is only sparsely covered by glacial drift and is characterized by extensive outcrop exposure. This area has been subjected to only one of the most recent glacial advances (the Whiteshell - from the northeast) because of the elevated topography which prevented the advance of other glacial lobes from the west. Glacial drift attains significant thickness only in very local areas. It displays few signs of intense weathering (Bajc, 1991b). Relief is controlled by bedrock geology with the supracrustal sequences displaying positive relief relative to the batholithic complexes; relief can attain 90m.

The broad lowland, reduced to a peneplain during Cretaceous time (Teller and Blueule, 1983), which occurs to the south and west of the break has been subject to either two (central areas) or three (west areas) late-Wisconsinan glacial events. Here outcrop ranges from 5-40%, thick drift blankets bedrock surfaces and saprolites are commonly observed in boreholes. The area has been subdivided by Bajc (1991b) into two regions. Region 2a contains 30-40% outcrop by area, and may attain significant relief which is related to bedrock topography; areas separating outcrops are sites of extensive drift accumulation. In region 2b outcrop comprises less than 5% of the surface area, topography is low and undulating, drainage is poor, and peatland is common.

The area underlying the Richardson Township - Potts Township area lies at the margin of 2a and 2b topography. Large outcrop areas to the north and east provide the maximum relief. To the west and south small outcrop areas provide limited relief in extensive flat lying ares covered by substantial till and bog accumulations.

#### 4.º Exploration History

Although exploration activity in the area by individual prospectors dates back to the 1930's, documented exploration in Ministry of Natural Resourcesent assessment files commences in 1967. Additional exploration programs are known to have taken place on private land, however record of assessment was not filed for this work.

In 1967 copper was recorded from a water well hole on the western shore of Off Lake. Consequently Noranda Exploration Company registered claims around the original discovery and performed mapping, geophysics, and diamond drilling; this activity met with limited success and the claims were allowed to lapse.

In 1971 International Nickel Company of Canada Limited conducted airborne and follow-up ground geophysics in the region as a whole; although there is no record of this work Inco did file a report on two diamond drill holes in Richardson Township in 1973. Reportedly one of these drill holes encountered anomalous gold values (D. MacEarchern, per. comm.).

In 1972 Hudsons Bay Exploration and Development carried out airborne geophysical surveys followed by claim staking and ground geophysics. In 1973 HBED drilled 54 diamond drill holes regionally to test 42 E.M. conductors, including anomalies in Tait Township, adjacent to the south of the Quetico Fault (Nelson, 1990). The principal target of this exploration was base metal and none of the work was filed for assessment purposes, although it is apparent that it was subsequently available to Mingold personnel.

In the mid 1980's exploration programs were mounted in Menary Township and the Off Lake area by several companies. Agassiz resources examined the potential for both base metal and gold in both area's with a program of mapping, stripping, sampling, and geophysics over two field seasons. In the process they discovered numerous showings of both gold and copper-zinc; note particularly what came to be termed the Agassiz Showing in Menary Township. In 1984 Lacana Mining Corporation undertook a single field season of mapping and sampling over an extensive area adjacent to Off Lake and Burditt Lake; no significant areas of mineralization were reported. Spartan Resources conducted an I.P. survey over a grid adjacent to the eastern shore of Off Lake in 1988. Anomalous responses were obtained from the survey but no further assessment is recorded, although unreported trenching, stripping and sampling was conducted at the site of the survey.

In 1989 Western Troy Capital Resources began a mapping and sampling program on claims staked in Menary Township which partly encompass the lapsed properties of Agassiz and HBED, and the gold and base metal occurrences discovered during those programs. Following initial exploration for base metals Western Troy discovered "several" native gold bearing, quartz veins late in 1991. The veins are at present interpreted to be the folded and boudinaged fragments of a single original vein. When sampled this zone returned an average of 1.4 oz/ton gold. Subsequently additional showings were discovered later in 1991 and during the 1992 season. Interestingly most of these veins are situated in the lowermost unit of the mafic stratigraphic succession of the area, in close proximity to the contact of the Sabaskong Batholith. A 250 ton bulk sample of the veins discovered in 1991 was conducted during the 1992 program; this was expanded to a reported 500 tons and completed in September of 1993. Additional, more ambitious, extraction was conducted throughout the 1994 field season (to December, 1994).

Considerable interest was generated in the area west of Finland following the release of the O.G.S. publication "Gold Grains in Rotosonic Drill Core and Surface Samples (1987-1988), Map No. P.3140. In 1989 Mingold Resources Inc. staked 85 claims and optioned property from 12 local landowners in three separate blocks in Richardson, Tait, Patullo, and Sifton townships. Between mid-1989 and late-1990 Mingold conducted a sampling program of the glacial drift by hand, backhoe trenching, and reverse circulation drilling. This work was accomapnied by geological mapping and ground geophysics. Subsequently, a limited diamond drilling program consisting of three drill holes was conducted in Patullo Township based on these surveys; the results of this

drilling were inconclusive and the anomalous values obtained in the tills were generally unexplained. The Canadian activities of Mingold were terminated prior to complete assessment of all anomalous results.

Nuinsco Resources subsequently began to assemble a land position in the region in 1991, initially centred on the Richardson Township - Menary Township area. In 1993 the land position was expanded to include Crown Land in several townships extending west to the international boundary and currently Nuinsco has claims and options comprising some 25,000ha in the region.

Between the initiation of field work in June, 1993, and March, 1996 Nuinsco Resources has completed a Landsat linear study; local I.P., magnetometer, horizontal loop E.M., surface P.E.M., borehole P.E.M., surveys as well as additional interpretation of selected parts of the 1990 government sponsored regional airborne E.M.mag survey; regional reconnaissance mapping and sampling; enzyme leach soil sampling; detailed grid mapping: outcrop stripping and trenching, four separate programs of rotasonic and reverse circulation drilling, comprising some 369 holes in total; diamond drilling in Menary, Senn and Richardson townships comprising 77 drill holes.

#### 5.º Claim Descriptions

The Nuinsco Resources Ltd. property group discontinuously spans 60km east to west and encompasses 25,087ha in total at time of writing. It is composed predominantly of mineral claims on Crown Land (20,521ha), with subordinate optioned patentented ground (4,222.<sup>89</sup>ha), and a License of Occupation from the Agricultural Rehabilitation Development Agreement (A.R.D.A., 353.10ha). The land position in its entirety falls within the jurisdiction of the Kenora Mining Division, Ministry of Natural Resources Administrative District of Fort Frances.

The assessment work conducted and detailed in this report, consists of diamond drilling. All of the work was carried out on patented options in Richardson Township. Claim boundary locations are included on fig. 1 in the pocket included with this report. The claims on which work was conducted during the mechanical stripping and trenching program are listed below.

#### Table 1. Claims on which Diamond Drill Holes were Collared

Township	Lot No.	Concession	Owner	Drill Holes	
			ger Alle		
Richardson	S1/2,Lot 6	II .	LaFever	16,17,18	
	W1/2,Lot 6	I	Morrison	12,15	
	Lot5	I	Jackson	13,14,19	
	S1/2,Lot7	I	A.R.D.A.	20	

The Nuinsco Resources claim groups are located in the 900km long by 150km wide granite-greenstone terrain of the Wabigoon Subprovince in the western Superior Province. Approximately 100km to the west of the property area the Archaean rocks of the shield are covered by Phanerozoic sedimentary strata in southern Manitoba and Minnesota. Much of the extreme southwest part of the Wabigoon, and particularly the area encompassing the Nuinsco land holdings has been reduced to a peneplain, the result of extensive Cretaceous erosion and weathering; this region is the site of extensive regolith accumulation comprised of (apparently) locally extensive saprolites, Quaternary glacial drift, and Recent accumulations.

The region has been the subject of several Ontario Department of Mines - Ontario Geological Survey mapping programs from which much of the geological descriptions are excerpted, these studies are listed below.

#### Table 2. O.D.M.-O.G.S. Reports Covering in the Rainy River Region

1954.	Fletcher and Irvine	O.D.M. Vol LXIII, part 5. The Geology of the Emo Area
19 <b>76</b> .	Blackburn, C.E.	O.D.M. G.R.140. Geology of the Off Lake Burditt Lake Area
19 <b>83</b> .	Edwards,	O.G.S. Rep. 201. Geology of the Bethune Lake Area.
1988.	Johns, G.	O.G.S. Map P3110. Geology - Rainy River Area.

#### 6.1 Precambrian Geology

The Western Wabigoon region underlying the Nuinsco claim groups is composed of supracrustal metavolcanic and metasedimentary rocks of the Rainy River Greenstone Belt (Blackburn et al., 1992). Syntectonic granitoid batholithic complexes (Sabaskong Batholith, Fleming Township Tronjhemites, Jackfish Lake Complex) occupy the northwest, northeast, and east of the region respectively. Late to post tectonic stocks such as the zoned Blackhawk, homogeneous Finland and inhomogeneous Burditt Lake as well as other unamed intrusions are located within the boundaries of the greenstone terrain.

The extreme northwest of the region, centred around the north part of Burditt Lake and Pipestone Lake is underlain by submarine mafic flows and pretectonic, subvolcanic, quartz-hornblende gabbro and leucogabbro intrusions (Edwards, 1983). These rocks have been folded into the northeast trending Silver Lake Syncline, the axial trace of which is identifiable to Dad Lake in the north and to the contact of an apophysy of the Sabaskong Batholith near Tompkins Lake in the south. Rare occurrences of mafic to intermediate tuff (described as shardy to ashy, Edwards, 1983) occur within the metavolcanic package. Where mapped in the Burditt Lake area the metavolcanic succession is approximately 4-5km wide located between the Sabaskong Batholith to the northwest and the Jackfish Lake-Weller Lake Pluton to the southeast. Edward (1983) ascribed a crude zonation in the metavolcanic assemblage, consisting of a Lower Mafic Group of 300-900m thickness adjacent to the Sabaskong Batholith, overlain by a Middle Mafic Group.

The metavolcanic stratigraphy to the central part of the region extending south to the interpreted trace of the Quetico Fault has been subdivided on lithological grounds. In the north and west of the map area stratigraphy has been divided into six mappably distinct mafic tholeiitic units while in the south and east five distinct intermediate-felsic calc-alkaline units were identified. The underlying mafic members comprise approximately 2/3 of the metavolcanic pile and the overlying felsic-intermediate accumulations approximately 1/3. The true thickness of the entire sequence is estimated at approximately 4.<sup>5</sup>km, however the belt narrows to approximately 1.<sup>6</sup>km near the boundary between Richardson and Potts townships, and broadens to more than 10km as a result of



## **REGIONAL GEOLOGY** WESTERN WABIGOON SUBPROVINCE AND ITS MARGINS

#### Table 3

#### LITHOLOGIC UNITS

#### PHANEROZOIC

(A) Pleistocene and Recent

till, sand, gravel, clay, organic debris

-----Unconformity-----

#### PRECAMBRIAN

(B) Proterozoic

-Mafic Intrusive Rocks -Diabase dykes

-----Intrusive Contact-----

(C) Archean

-Intermediate to Felsic, Intrusive Rocks

Equigranular trondhjemite, granitic dykes, equigranular monzonite and intrusive breccia

-----Intrusive Contact-----

-Felsic Metavolcanic Rocks

Medium grained to porphyritic rhyolite and dacite, quartz feldspar porphyry dykes

-Mafic to Intermediate Metavolcanic Rocks

Fine to medium grained basalt and andesite, gabbro, pillowed basalt, porphyritic basalt, pillowed and porphyritic basalt, pillowed variolitic basalt, spherulitic basalt, tuff, tuff breccia, and lapilli tuff folding near the Sifton and Richardson townships boundary. The mafic volcanics are described as being composed of massive, porphyritic, and pillow lavas and gabbroic lavas (gabbro's?). The felsic-intermediate rocks are described as volcanic to subvolcanic and equivalent intrusive phases and are composed of pyroclastic breccias, lapilli tuffs, ash tuffs, and quartz-feldspar porphyries of often equvocal origin. The Sabaskong Batholith occupies the northwest portion of this area while the Rainy Lake Batholith and Fleming Township Tronjhemites. The late to post tectonic Blackhawk and Finland stocks have been intruded into the centre south of the map area, deflecting bedding radially around the intrusions.

In the west of the region (i.e. west of the Sifton-Richardson townships and Tait-Pattullo townships boundaries) preliminary mapping by Johns (1988) has crudely outlined metavolcanic stratigraphy, although mapping was greatly hindered by the lack of outcrop in this area extensively covered by glacial drift. The metavolcanic rocks are divided into two stratigraphic units. A lower mafic unit consisting of massive and pillowed mafic flows with local pillow breccia, hyaloclastite, and feldspar phyric flows, gabbro occurs in the extreme west, northeastern and southeastern portions. An upper diverse member conformably overlies the lower member and is composed of interbedded and interdigitated mafic and intermediate flows, debris flows, intermediate pyroclastics, wacke, and reworked tuff. In the eastern portion of this area volcanic derived metasediments (bedded wackes) occur and extend eastward.

The south and southeastern part of the region south of the Richardson-Potts-Fleming townships south boundaries was mapped by Fletcher and Irvine (1954). Felsic and intermediate metavolcanics occur in the south of the area in Dobie and Shenston townships (also in the north as the southern continuation of the metavolcanics mapped by Blackburn). These units are composed of quartz-feldspar porphyries, blocky fragmentals (agglomerate), and tuffs. Mafic metavolcanics occur in association with the felsic-intermediate members and are composed of fine to coarse grained flows and pillow lavas and associated interbedded mafic rich interflow metavolcanic sediments. Additionally, extensive wackes occur in two bands extending from west of the map area (see Johns, 1988) and interpreted to be the opposing limbs of a syncline; the bands are separated by a granitoid (granidiorite) intrusion. The metavolcanic-metasedimentary stratigraphy is again intruded by numerous igneous bodies including the southwestern extensions of the Rainy Lake Batholithic Complex, as well as mafic intrusions such as the Dobie Intrusion and the Lash-Carpenter Intrusion.

Regional metamorphic grade is regarded as being generally of greenschist to low-mid amphibolite facies (although higher grades are noted by Johns in the west and Fletcher and Irvine in the south and west). Metamorphic grade, particularly adjacent to the late-post tectonic stocks may attain upper amphibolite with possible local partial remelting of the host rocks.

Structurally the region is complex with very incomplete elucidation of the structural elements in the west and south. Evidence of stratigraphic facing comes dominantly from the presence of pillows. In the extreme north the metavolcanic succession has been folded around the Sabaskong Batholith into the east-northeast trending Nightjar Anticline which is paired with the Slender Lake Syncline to the southeast. The Helena-Pipestone Lake Fault extends south to Dad Lake and in the north approaches the trace of the Pipestone-Cameron Fault. Continuing to the south the metavolcanic stratigraphy of the Offlake-Burditt Lake area are considered to form a southeasterly facing homoclinal sequence between the Sabaskong Batholith and the Burditt Lake Stock and the Fleming Township Tronjhemites. Farther to the west the metavolcanic-metasedimentary stratigraphy has been folded about the north-south axes of the southward plunging Deerlock Syncline which is paired with an unamed anticline in Richardson Township. South of this area Johns (1988) has inferred the presence of a complex fold pattern, showing several anticline-syncline pairs which strike northeast curving to the east. Fletcher and Irvine (1954) infer the presence of three folds, two anticlines and a syncline with east to northeast striking axes - as with those mapped by Johns.

The southern part of the region is ttransected by the Quetico Fault, although the surface trace of the fault is only conjectured in the west. The fault is traceable for over 200km and in part defines the southern boundary of the Wabigoon Subprovince (to the east of the project region). Dextral transcurrent offsets are interpreted to be

the major movement, estimated to be upto 128km (Mackasay et al., 1974, Blackburn et al., 1992). A southerly splay from the Quetico is interpreted to strike northeast passing near the village of Stratton.

Well defined penetrative deformation is commonly observed on a regional scale. At the margins of intrusive bodies foliation/schistocity can be very strongly developed, striking tangentially to the contact of the intrusion.

#### 6.<sup>2</sup> Cretaceous Geology

Cretaceous Sediments occupy the Red River Valley and are observable in Manitoba, Minnesota, and North Dakota where they blanket older sediments that fringe the Williston Basin (Bajc, 1991b).

In the Rainy River region no exposures of Cretaceous age have been documented but an outlier of Cretaceous marine clay has been noted 65km south of Fort Frances, suggesting a more extensive pre-existing presence (Bajc, 1991b).

Middle Cretaceous, non-marine, fossiliferous, clastic sediments have been encountered in an O.G.S. borehole 7.<sup>5</sup>km northwest of Rainy River. Composed primarily of white to buff coloured, moderately sorted, silica sand and gravel the occurrence is located in a protected hollow, down-ice from prominant bedrock highlands.

Additionally, results from the Nuinsco 1995 overburden drilling program and preliminary results from the 1996 overburden drilling indicate more widespread occurrences of probable Cretaceous and possible Jurassic sediments from elsewhere in the Rainy River region.

Thick saprolites (of diverse protolith), presumed to be Cretaceous in age have also been documented, attaining in excess of 60m and encountered in several O.G.S. and Nuinsco overburden boreholes and diamond drill holes in the region, suggesting previously widespread residual soil over much of the Precambrian Shield, subsequently removed by Quaternary and Tertiary erosion (Bajc, 1991b).

#### 6.3 Quaternary Geology

The youngest members of the stratigraphic succession are widely distributed, unconsolidated sediments which blankets the entire region, becoming very thick to the west.

Generally the unconsolidated sediments encountered are Late Wisconsinan tills. However reports in Bajc (1991b) indicate that pre-Late Wisconsinan tills have been preserved locally under significant Late Wisconsinan till cover and have only been observed in boreholes; they are interpreted to be Early Wisconsinan or perhaps Illinoian in age.

The oldest Late Wisconsinan deposits are attributed to an ice advance originating from the northeast (Labradorean Lobe, Laurentide Ice Sheet), and has been named the Whiteshell Till. This till is widely distributed as a discontinuous veneer and in bedrock depressions and in the lee of topographic highs (Bajc, 1991b). It is also concealed beneath younger tills and is observed in overburden boreholes in the west part of the study area. This till may contain 15-70% clasts with lithologies which closely reflect underlying bedrock type. The matrix is composed of sand and silt with only minor clay (Bajc, 1991b). Associated glaciofluvial sediments were deposited either subglacially or subaqueously and consist of stratified sands and gravels.

Overlying Labradorean derived drift are Keewatin derived tills which originated with ice advancing from the west, they extend east to the site of the present day Lake of the Woods-Rainy Lake Moraine. The Whitemouth Lake till is the oldest Keewatin derived till, it is composed of a sand-silt-clay matrix comprising 90-95% of the unit and containing generally <5cm pebbles of dominantly carbonate composition, although shale, siltstone and lignite are also noted.

Glacial deposition was complete by some time shortly after 11,600 years B.P. (date of the Whitemouth Lake till deposition - Bajc, 1991b). The initial phases of Glacial Lake Agassiz commenced around 11,500 years B.P. and the lake inundated parts of the region, depending on water level fluctuations, until 7,500 years B.P. Glaciolacustrine phases of deposition recognized in the region include pre-Lockhart (pre-Late Agassiz), Lockhart, Moorhead, Emmerson, Nipigon, and Ojibway phases. All phases consist of sand, silt, clay, glaciolacustrine lacustrine sediments deposited between and above the previously deposited till horizons.

#### 6.4 Recent Deposits

Extensive peat deposits occur throughout the study area, attaining 8m depth in the east near Fort Frances and generally thinning to the west. Radiocarbon dating gives a maximum age of approximately 5000 years for these deposits.

Finally recent alluvium, and eolian deposits are restricted to the floodplains of the major water courses. They are composed of organic rich sand, silt, and clay (Bajc, 1991b).

#### 7.º Local Geology

The local geology of Richardson Township and immediately surrounding areas is generally poorly understood because of the paucity of outcrop. As mapped by Blackburn (1976) and Johns (1988) the area is underlain by a thick succession of tholeiitic mafic volcanics which conformably passes into an upper diverse metavolcanic unit of often intermediate composition. Mapping and overburden drilling by Nuinsco have further served to elucidate the geology in the local area around central Richardson Township.

#### 7.1 Lower Mafic Succession

The most abundant metavolcanic rocks in the area are mafic metavolcanic massive and pillowed flows, flow breccias, tuff-hyaloclastite, and interflow and graphitic sediments (these units correspond with M3 and M5 members of Blackburn's (1976) six member mafic stratigraphic succession). They have been observed in the northern part of Richardson Township and are folded around the nose of an unamed syncline (see plan XX). Consequently strike varies from approximately 45° on line 22+00E, to approximately 115° to the west of line 4+00W. Pillow tops comprise the sole criterium for stratigraphic facing and are consistent with the presence of a synclinal fold i.e. tops are to the southeast and south east of line 0+00 while on line 32+00W tops to the southwest were observed.

#### 7.<sup>2</sup> Felsic-Intermediate Succession

Abundant lichen growth and uniform weathering have hindered detailed mapping of individual stratigraphic units within the upper diverse succession. Efforts to clean individual outcrops and subsequent diamond drilling indcate that stratigraphy within the upper diverse succession can be varied and complex. Certainly evidence from stripped outcrops indicates that numerous individual units comprise the stratigraphic assemblege and that as a result of subsequent deformation these units may be truncated, juxtaposed or folded. Wholerock analyses indicate that many of the members of this succession plot near the boundary between tholeiitic and calc-alkaline domains within dacite and andesite fields of the Jensen Cation Diagram.

As with the underlying mafic metavolcanic assemblage the felsic-intermediate rocks have been folded around the axis of the syncline. Abutting the western contact the Blackhawk stock, mapping, overburden and diamond drilling show the these units to extend well to the west and northwest of earlier interpretations.

In addition to the quartz eye dacite fragmentals (crystal-ash tuff) which form the dominant portion of the succession, subordinate, intermediate, flows and intrusions occur and range from sub-metre to decametre widths. Thinner tuffaceous and sedimentary horizons, which may be siliceous, chloritic, argillic, or graphitic, and oxide facies iron formation have also been intersected in drill holes. In addition intercalated, fine grained, mafic flow/tuff horizons have been intersected in several drill holes throughout the predominantly intermediate stratigraphic succession; they are observed at surface between lines 6+00W and 10+00W near the 8+00S tieline. A subordinate but highly visible member of the succession is a matrix to fragment supported blocky fragmental unit with abundant groundmass chlorite which envelopes the more siliceous fragments. Typically these horizons contain 45%-50% SiO<sub>2</sub> and may contain upto 25% pyrite in bands that may crudely define bedding. These units weather to a gossan of dark brown to black and are very evident in outcrop. They are interpreted as debris flows.

A noteworthy feature of the upper diverse succession is the abundace of disseminated sulphide mineralization encountered, particularly within the quartz eye dacite unit. It is evident on weathered outcrop surfaces as ubiquitous rusty patches. In drill core the pyrite presents as fine disseminations and fracture fillings. As fracture fillings the sulphide is often associated with quartz, chlorite, and carbonate, probably implying a dominantly epigentic origin. A pyrite content of approximately 2%-3% is common in an area, at surface, that is >2km by >1km. In addition very much subordinate pyrrhotite, sphalerite, chalcopyrite, galena, arsenopyrite and visible gold have been observed.

#### 7.3 Felsic-Intermediate Intrusions

Abundant felsic-intermediate dykes were observed to transect the mafic stratigraphic succession. They are particularly abundant on the large outcrop area between 6E and 11E. Here they bifurcate and rejoin, striking generally at approximately 30° and ranging from decimetre to tens of metres in thickness. Textural and chemical similarities between these bodies and the intermediate metavolcanics stratigraphically above suggest that these dykes were feeders to the felsic-intermediate succession.

Texturally these dykes are massive and or quartz and feldspar phyric. They are white grey on weathered surfaces and medium grey on fresh surfaces. there is a strong similarity between the porphyritic dykes and the porphyritic flows upsection; in all probability these units have been confused with one another in places.

#### 7.4 Mafic-Ultramafic Intrusions

Narrow (often sub-metre) mafic intrusions have been frequently been intersected in drill core. Generally the units are fine grained, massive to weakly feldspar phyric bodies with concordant and discordant contacts.

Diamond drilling has defined an irregular mafic-ultramafic body between lines 4+00W and 6+00W which is now known to extend form <-75m to >-200m depth. This body is zoned, grading northward from gabbro and high-MgO mafic rock in the south (stratigraphic top) to pyroxenite and dunite. The pyroxenite-dunite may contain intercumulate sulphide mineralization, locally comprising near 100% of the mode. Sulphides including pyrthotite, pyrite, chalcopyrite, pentlandite, tellurides including merenskyite, michenerite and hessite and the arsenide sperrylite have been identified in hand speciman or with the use of an electron microprbe.

#### 7.5 Black Hawk Stock

Where encountered the Black Hawk Stock is equigranular, coarse grained, unfoliated, pink-grey monzonite of the marginal phase of the stock. These outcrops tend to be larger than the metavolcanic ones and display significant positive relief.

The contact between the Black Hawk Stock and the enveloping metavolcanic rocks is generally unexposed. However numerous narrow aplite and rarely pegmatite dykes are observed to transect metavolcanic stratigraphy in proximity to the stock. These typically can be measured in decimetre to metre thickness.

#### 7.6 Diabase

A Proterozoic diabase dyke is observed at in outcrop near the southwest corner of Lot 4, Concession I. It is approximately 10m thick, weathers to a medium brown colour, strikes 230° and dips near vertically. The strike extension of this diabase is inferred from intersections in drill holes on the north half of lots 5 and 6, Con I and the south half of Lot 6, Con II. Note that this dyke appears to have a sinestral offset of several tens of metres, occurring near line 2+00W.

#### 7.7 Structural Geology

The area underlying the immediate Richardson Township area is interpreted to be folded about the nose of a south plunging anticline, paired with the Dearlock Syncline located approximately 3km to the west.

On the east limb of the anticline between lines 22+00E and 0+00 bedding measurements on the relatively abundant outcrop shows strike to be approximately 50° to 60°. The few measurements available between lines 0+00 and 8+00W show strike to be almost east-west. To the west of 8+00W no measurements are available but intersections obtained from overburden drilling and pillow facing obtained from an outcrop west of the map area are consistent with strike to the northwest. Where measured bedding varies from vertical to approximately  $70^{\circ}S$ 

subvertical to the south although near the nose of the anticline dips may be much shallower - between  $50^{\circ}$  and  $60^{\circ}$  south.

Foliation approximately parallels bedding and is deflected around the nose of the fold. Planar fabrics are well developed throughout the volcanic pile except in the coarser grained gabbroic basalt and felsic-intermediate dykes. Intense foliation/schistocity is developed on the large intermediate-felsic outcrop on lines 19+00E and 20+00E adjacent to the Black Hawk Stock; the fabric parallels the inferred contact of the stock; but it is also often folded and contorted and envelopes dismembered, boudinaged veins and dykes within the deformed intermediate volcanics. The regional foliation trajectories are observed to deviate to the north and south around the Black Hawk Stock.

Preliminary results from diamond drilling show ubiquitous deformation of variable intensity. Although locally foliation/schistocity obscures or completely masks preexisting texture, these structures have not been traced from section to section. Stripping and cleaning of outcrops between lines 6+00W and 10+00W has uncovered a number of narrow (cm scale), Au anomalous, shears, striking 80°-115° and dipping 50°-60° south. Further, more diffuse deformation in a wider (approximatey dm scale) zone is noted from other trenches in the same area.

Faults are inferred in south Richardson Township based on lithological discontinuities and alteration observed in drill core. Magnetic discontinuities also imply faulting. Although more than one direction is assumed, N-S faults may significantly modify stratigraphy; an Au mineralized N-S fault is observed on the stripped outcops near line 7+00W and N-S faults are inferred to offset lithologies near line 2+00W and 10+00W.

#### 8.<sup>0</sup> March 1996 Diamond Drilling

This report covers the results of diamond drill holes NR-96-12 through NR-96-20, drilled during March, 1996. In total 2169.41m of drilling was completed during the reporting period. Two drilling contractors were engaged during the winter program. Ultra Mobile Diamond Drilling of Surrey, British Columbia, drilled holes NR-96-12,15,16,17,18 and 20, using a thinwall BQ system. Bradley Brothers Diamond Drilling of Timmins, Ontario drilled holes NR-96-13,14, and 19, producing NQ core. All holes were collared on the Richardson Township grid. This grid is oriented N-S with offsets along the baseline at 100m intervals (locally 50m and 25m) where drilling was conducted, stations occur at 25m or 50m along the offsets.

Drill hole data is tabulated below in Table X., the drill logs are located in Appendix I, drill cross sections and the drill plan are located in the pocket. A brief description of the drill targets and results follows. At time of writing only a small proportion of the assay data had been received, it is not presented here.

The drilling conducted during the report period was collared on diverse targets, aimede at obtaining data from several different target areas.

Drill holes NR-96-12 and 15 were collared to intersect stratigraphy on strike from the anomalous Au bearing rock of the 17 Zone. These holes intersected predominantly quartz eye dacite pyroclastics, exhibiting strong saprolitic weathering at the bedrock interface. Well developed foliation was encountered in NR-96-12 with ubiquitous pyrite and minor sphalerite and chalcopyrite. Hole NR-96-15 intersected mafic (possibly ultramafic) volcanics intercalated with the dacite pyroclastics, however very little pyrite occurs and only planar fabric is developed.

Drill holes NR-96-13, 14 and 19 were collared to test the area around the 34 Zone mafic-ultramafic body. Drill hole NR-96-13 did intersect coarse grained pyroxenitic gabbro between 149.<sup>90</sup>m-170.<sup>79</sup>m; at the lower (downhole) contact fine grained pyrrhotite, pyrite, and chalcopyrite occurs as interstitial (intercumulate?) grains. The remainder of this hole intersected a mixed succession intermediate pyroclastic rocks and possible intermediate intrusions. The possible down-dip extension of the 17 Zone of Au mineralization was encountered in hole 13 between 273.<sup>15</sup>m-380.<sup>10</sup>m where disseminated and fracture filling pyrite with lesser sphalerite, chalcopyrite and galena occur. NR-96-14 was collared to intersect the eastern extension of the mafic-ultramafic body to the east of the diabase dyke. Apart from the diabase, essentially no mafic or ultramafic rock was encountered in this drill hole; implying offset across the diabase? Quartz Eye Dacite was encountered throughout the drill hole with locally well developed fracture filling sulphides composed of pyrite, sphalerite, chalcopyrite, and arsenopyrite - particularly between 124.<sup>40</sup>m-226.<sup>30</sup>m. NR-96-19, collared on line 6+50W to test the western extension of the mafic-ultramafic body. The target body was not intersected at all. The hole was collared in mafic metavolcanic rocks, intersecting a succession of mixed mafic flows and possible intrusions (with lesser intermediate metavolcanics) to a depth of 201m. From 201m to the end of hole at 329.<sup>10</sup>m hole19 intersected intermediate metavolcanics (QID). Only very limited sulphide mineralization was encountered.

NR-96-16,17,18 were collared on line 16+00W. Hole 16 was collared to undercut a substantial single line mag. anomaly centred at 4+00N. This drill hole intersected mixed mafic and intermediate metavolcanic rocks: limited sulphide was noted but substantial magnetite occurs as disseminated grains in the mafic units - thereby explaining the mag. response. Drill hole 17 and 18 were set-up to undercut multiple enzyme leach soil sample anomalies. Hole 17 failed to obtain bedrock. Hole 18 intersected a mixed succession of mafic and intermediate metavolcanic units; lithologies and mineralization encountered do not appear to explain the anomaly.

Drill hole NR-96-20 was collared to intersect the strike extension of an I.P. response obtained to the west of this hole location. This I.P. response was found, when drilled 200m to th west, to be the site of strong brittle-ductile deformation within a dacite (and possibly andesite) fragmental succession with weak coincident disseminated sulphide mineralization (pyrite). Hole 20 intersected similar lithologies with well developed planar fabric developed between 18.<sup>40</sup>m-75.<sup>00</sup>m and containing disseminated pyrite.

## Table 3:

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				Rainy F Diamond	River Pr Drill Hole [	oject: Ri Data - Mar	chardson ch 1996 Diam	Townsl	nip Grid.		
DDH No." NR-96-12	Driller	Latitude metres	Departure metres	Inclination degrees	Azimuth degrees	Started	Completed	Depth metres	Casing	Claim No. Richardson Twp.	Comments
NR-96-13 NR-96-14 NR-96-15 NR-96-16	BBDD BBDD UMDD	6+00W 3+50W 16+00W	3+25S 7+75S 6+75S 4+75S	-55 -75 -65 -55	000 000 000 000	01/03/96 03/03/96 10/03/96 12/03/96	09/03/96 10/03/96 22/03/96	276.45 474.20 334.00	Removed Left Left	W1/2,Lot6,Coni Lot5,Coni Lot5,Coni	Hole restarted
NR-96-17 NR-96-18 NR-96-19 NR-96-20	UMDD UMDD UMDD BBDD UMDD	12+00W 12+00W 12+00W 6+50W 20+00W	3+25N 6+75N 6+75N 8+75S 2+50N	-55 -55 -60 -75 -55	000 000 000 000 000	16/03/96 20/03/96 22/03/96 23/03/96 27/03/96	15/03/96 19/03/96 22/03/96 25/03/96 27/03/96 29/03/96	191.11 212.50 0.00 185.01 323.93 172.21	Removed Removed Removed Removed Left Removed	W1/2,Lot6,Conli S1/2,Lot6,Conli S1/2,Lot6,Conli S1/2,Lot6,Conli Lot5,Conli S1/2,Lot7,Conli	Deepened 21/03-22/03 Abandoned in OB

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### 9.<sup>0</sup> Conclusions

The diamond drilling that is the subject of this report comprises a small portion of an extensive and ongoing exploration program in Richardson Township and the Rainy River region as a whole, started in 1993. As such, any conclusions drawn from such a small component of the program may very well be out of context with respect to the results obtained from the other components. The principal reason for reporting this work is as assessment.

#### References

- Bajc, A.F., 1991a. Till Sampling Survey, Fort Frances Area. Results and Interpretation. O.G.S. Study 56, 214pp, plus plans.
- Bajc, A.F., 1991b. Quaternary Geology, Fort Frances Rainy River Area. O.G.S. Open File Report 5794, 170pp, plus plans and sections.
- Blackburn, C.E., 1976. Geology of the Off Lake Burditt lake Area, District of Rainy River. O.D.M. Geoscience Report 140, 62pp, plus map.

10.<sup>0</sup>

#### **Certificate of Qualifications**

I, Paul Latimer Jones resident at 27 Briarmoor Crescent, Ottawa, Ontario, Canada, K1T 3G7, do hereby certify that:

- 1: I am a Consulting Geologist, since 1986.
- 2: I am graduate of Carleton University, Ottawa, 1982, with a B.Sc. (Hons.) in Geology.
- 3: I have been engaged in the study and practice of my profession since 1978.
- 4: I am a registered Fellow of the Geological Association of Canada.
- 5: This report is based upon onsite supervision of the Nuinsco Resources Limited exploration program in the Richardson Township area.

Dated at Emo, this First day of April, 1996.

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Paul L. Jones, B.Sc., FGAC.

#### **Certificate of Qualifications**

I Christopher Anthony Wagg of R.R. #1 (L.12, C.10) of the village of Denbigh, Ontario, K0H 1L0, do hearby certify that:

- 1: I hold a Bachelor of Science (Honours Geology) from the University of Western Ontario, received in May, 1989.
- 2: I have been self-employed as a geological exploration consultant since 1987, and have been practising my profession continuously since graduation.
- 3: I am president and sole shareholder in Wagg Mineral Exploration and Consulting Inc., created in 1991, which is a corporation in good standing under the laws of the Province of Ontario.
- 4: I personally performed the core examination and sampling, and directly supervised the sample collection and shipment for all drill holes for which my signature appears upon the logs.
- 5: I hold no interest directly or indirectly in the properties or securities of Nuinsco Resources Limited or affiliated companies, or in any adjacent properties, nor do I intend to acquire any such interest.

Dated at Emo, Ontario, this First day of April, 1996,

hed

Christopher A. Wagg, B.Sc. President, Wagg Mineral Exploration and Consulting

## **APPENDIX I**

## **EXPLORATION DATA**

## **DIAMOND DRILL HOLE LOGS**

#### SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

PROPERTY: Richardson HOLE NO: NR9612 GRID: Rich

/03/96-09/03/96 DATE: SURVEY BY: INSTRUMENT: Acid Test/Sperry Sun

COMMENTS: Logged by C.A.Wagg DDH drilled on claim Lot6, ConI, Richardson Twp. Drill Contractor Ultra Mobile Diamond Drilling. Kodlad how

DEPTH	INCLINATION	BEARING	EASTINGS	NORTHINGS	ELEVATION
0.00	-55.00	0.00	-1600.00	-325.00	0.00
39.63	-50.00	0.00*	-1600.00	-300.87	-31.44
154.57	-52.00	0.00*	-1600.00	-228.54	-120.77
214.07	-46.00	9.00	-1596.94	-189.63	-165.67
274.39	-45.50	12.00	-1589.27	-148.24	-208.88
276.45	-45.50	12.00*	-1588.97	-146.83	-210.35

<-- Interpolated Data \* Not Measured + Assumed Reading

Page 1

\*\* BORSURV \*\* SUMMARY LITHO LOG Page 1 PROPERTY: Richardson HOLE No.: NR9612 FROM TO C.A. LITHOGICAL UNIT 0.00 OVB 37.05 QID, saprolite. 37.05 43.30 43.30 78.00 QID 78.00 78.35 QV, py,cpy,asp. 78.35 93.40 QID 93.40 118.25 75 QID, fol,py,cpy,gal. 118.25 171.00 72 QID, weak fol, py. 171.00 187.75 72 QID, fol,py,gal. 187.75 228.50 QID, py 228.50 253.20 72 QID, weak fol, py. 253.20 264.96 70 QID, fol,py. 264.96 267.45 Fel. Intrus. 267.45 276.45 80 QID, weak fol, py.

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Page 1

#### SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

PROPERTY: Richardson HOLE NO: NR9613 GRID: Rich

DATE: 03/03/96-10/03/96 SURVEY BY: D.M.E. INSTRUMENT: Sperry Sun

COMMENTS: Logged by C.A.Wagg DDH drilled on claim Lot5, ConI, Richardson Twp. Drill contractor, Bradley Bros. Diamond Drilling. ===#==== \_\_\_\_\_ The america \_\_\_\_

DEPTH	INCLINATION	BEARING	EASTINGS	NORTHINGS	ELEVATION	
0.00	-75.00	360.00	-600.00	-775.00	5.00	
62.80	-72.50	356.00	-600.61	-757.44	-55.29	
135.98	-69.50	356.00*	-602.28	-733.67	-124.48	
196.95	-71.00	365.50	-602.01	-713.07	-181.87	
257.93	-69.50	365.00	-600.12	-692.55	-239.26	
318.90	-67.00	367.00	-597.76	-670.08	-295.89	
379.88	-65.00	370.00	-594.09	-645.55	-351.60	
437.81	-64.00	372.00	-589.33	-621.07	-403.88	
474.20	-64.00	372.00*	-586.02	-605.47	-436.59	

<-- Interpolated Data \* Not Measured + Assumed Reading</pre>

\*\* BORSURV \*\* SUMMARY LITHO LOG Page 1 PROPERTY: Richardson HOLE No.: NR9613 FROM TO C.A. LITHOGICAL UNIT 0.00 18.85 OVB 18.85 44.80 QID, K alt. 44.80 47.35 QID, contam.? 47.35 52.15 QID 52.15 59.30 Int. QFP Intrus. 59.30 62.00 QID, tr py, sph. 62.00 77.40 Int. QFP Intrus. 77.40 83.30 QID, tr py, sph. 83.30 88.67 Int. QFP Intrus. 88.67 90.80 QID, py 90.80 99.08 Int. QFP Intrus. 99.08 105.15 QID, py,sph. 105.15 149.90 Int. QFP Intrus., py. 149.90 169.40 MUM MUM, fg, po,py,cpy,mag. 169.40 170.79 170.79 192.90 QID, py. 192.90 200.05 Tuff/Sed., pyritic 200.05 204.40 QID 204.40 205.85 Tuff/Sed., pyritic 205.85 207.40 Dacite Ash Tuff Tuff/Sed., pyritic 207.40 210.00 210.00 215.05 QID, py. 215.05 221.95 Int. QFP Intrus.

221.95 227.32 QID, py,tour,gar.

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SUMMARY LITHO LOG PROPERTY: Richardson HOLE No.: NR9613

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FROM	TO	C.A.	LITHOGICAL UNIT
227.32	248.38		QID py,gar.
248.38	248.84		Maf. Dyke
248.84	254.10		QID py,gar.
254.10	254.55		Maf. Dyke
254.55	255.85		QID py,gar.
255.85	256.25		Maf. Dyke
256.25	257.52		QID py,gar.
257.52	257.83		Maf. Dyke
257.83	273.15		QID py,gar.
273.15	304.50		QID py,sph,gar.
304.50	348.00		QID py,sph,cpy
348.00	365.60		QID py, tr sph.
365.60	365.65		QV Au, py,sph,cpy,gal.
365.65	380.10		QID py, tr sph.
380.10	403.98		QID, QV, py.
403.98	404.56		Maf. Dyke
404.56	474.20		QID, py, tr sph,cpy.

334.00

-53.50

#### \*\* BORSURV \*\*

7.00

Page 1

-277.46

#### SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

PROPERTY: Richardson HOLE NO: NR9614 GRID: Rich DATE: 10/03/96-13/03/96 SURVEY BY: D.M.E. INSTRUMENT: Sperry Sun

-506.98

COMMENTS: Logged by C.A.Wagg DDH drilled on claim Lot5,ConI, Richardson Twp. Drill contractor, Bradley Bros. Diamond drilling. ==7 ELEVATION NORTHINGS DEPTH INCLINATION BEARING EASTINGS 0.00 -65.00 0.00 -350.00 -675.00 10.00 53.66 -64.00 1.00 -349.80 -651.90 -38.43 5.00 114.63 -63.00 -348.37-624.73 -93.00 3.00 175.61 -60.00 -346.34 -595.71 -146.59 236.35 -55.50 5.00 -344.08 -563.37 -197.96

-338.16

\*\* BORSURV \*\* SUMMARY LITHO LOG Page 1 **PROPERTY:** Richardson HOLE NO.: NR9614 \_\_\_\_\_ FROM то C.A. LITHOGICAL UNIT 6.70 0.00 OVB Int. QFP Intrus. 6.70 49.65 49.65 51.25 QID, py 51.25 53.60 Maf. Dyke 53.60 61.00 QID, py, tr sph. 61.00 124.40 Diabase 208.75 124.40 QID, py, tr sph,asp, tour. 208.75 226.30 QID, sph,py,cpy,gal 226.30 228.50 Diabase 228.50 237.30 QID, py,sph,gar 237.30 238.12 Diabase 238.12 240.48 QID, py,sph,gar 240.48 241.73 Diabase 241.73 311.00 QID, py,tr sph,gar 311.00 334.00 QID, py,gar

#### \*\* BORSURV \*\*

Page 1

SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

PROPERTY: Richardson HOLE NO: NR9615 GRID: Rich

DATE: 12/03/96-15/03/96 SURVEY BY: D.M.E. INSTRUMENT: Sperry Sun

COMMENTS: Logged by C.A.Wagg DDH drilled on claim Lot6, ConI, Richardson Twp. Drill contractor, Ultra Mobile Diamond Drilling. BEARING ELEVATION DEPTH INCLINATION EASTINGS NORTHINGS -55.00 0.00 0.00 -1600.00-475.000.00 0.00 58.00 -60.00 -1600.00 -443.84-48.92 0.00\* 120.00 -56.00 -1600.00 -410.98 -101.50 11.00 -137.32 164.00 -53.00 -1597.55 -385.55 191.11 -53.00 11.00\* -1594.44-369.53 -158.97

<-- Interpolated Data \* Not Measured + Assumed Reading

\*\* BORSURV \*\* SUMMARY LITHO LOG Page 1 PROPERTY: Richardson HOLE No.: NR9615 FROM C.A. LITHOGICAL UNIT то 0.00 13.70 OVB 13.70 44.50 QID sap. 44.50 44.80 QID, bx?, sap. 44.80 66.55 Maf. Vol., Kom? 66.55 81.75 Int. QFP Intrus., sap. Int. QFP Intrus., sap.,py,asp. 81.75 88.75 88.75 98.46 Maf. Vol., sap. 98.46 102.37 QID, bleached, py 102.37 114.45 QID, mg-cg, tour, py 114.45 171.60 QID, tour,py 171.60 187.45 Dacite, fragmental? 187.45 191.11 QID
#### \*\* BORSURV \*\*

Page 1

#### SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

**PROPERTY:** Richardson HOLE NO: NR9616 GRID: Rich

DATE: 16/03/96-19/03/96 SURVEY BY: INSTRUMENT: Sperry Sun/Acid Test

COMMENTS: Logged by C.A.Wagg DDH drilled on claim Lot6, ConII, Richardson Twp. Drill contractor, Ultra Mobile Diamond Drilling ======== DEPTH INCLINATION BEARING EASTINGS NORTHINGS ELEVATION 0.00 -55.00 360.00 -1200.00 300.00 9.00 32.60 -54.00363.00 -1199.50 318.92 -17.5493.60 -53.50 357.00 -1199.50354.99 -66.73 154.50 -52.00 369.00 -1197.58 391.81 -115.21209.40 -50.00 366.00 -1193.07 426.06 -157.88212.44 -50.00 366.00\* -1192.86 428.00 -160.20

- <-- Interpolated Data \* Not Measured + Assumed Reading</pre>

\*\* BORSURV \*\* SUMMARY LITHO LOG Page 1 PROPERTY: Richardson HOLE No.: NR9616 FROM TO C.A. LITHOGICAL UNIT 0.00 12.05 OVB Maf. Vol. (Porph) 12.05 19.60 19.60 Gabbro 39.64 39.64 44.60 QID Maf. Vol. 52.50 44.60 52.50 56.90 QID Maf. Vol. 56.90 130.60 130.60 142.22 QID 142.22 Maf. Vol. 155.50 155.50 159.78 QID 159.78 163.70 Maf. Intrus. (Vol.?) 163.70 165.05 QID Int. Ash Tuff 165.05 173.70 173.70 177.50 QID Int. Ash Tuff 177.50 187.93 187.93 193.80 QID 193.80 208.58 Int. Ash Tuff? Bx

208.58 212.44 QID

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Page 1

SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

PROPERTY: Richardson HOLE NO: NR9617 GRID: Rich DATE: 20/03/96-22/03/96 SURVEY BY: INSTRUMENT: Acid Test

COMMENTS: Abandoned in overburden. DDH drilled on claim Lot6, ConII, Richardson Twp. Drill contractor, Ultra Mobile Diamond Drilling ELEVATION DEPTH INCLINATION BEARING EASTINGS NORTHINGS 0.00 -50.00 0.00 -1200.00 675.00 15.00 35.00 ~55.00 0.00\* -1200.00 696.31 -12.77 <-- Interpolated Data \* Not Measured + Assumed Reading

Page 1

SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

PROPERTY: Richardson HOLE NO: NR9618 GRID: Rich DATE: 22/03/96-25/03/96 SURVEY BY: INSTRUMENT: Acid Test

COMMENTS: Logged by C.A.Wagg DDH drilled on claim Lot6, ConII, Richardson Twp. Drill contractor, Ultra Mobile Diamond Drilling. ELEVATION BEARING EASTINGS NORTHINGS DEPTH INCLINATION -1200.00 15.00 0.00 -60.00 0.00 675.00 -57.00 36.00 0.00\* -1200.00693.81 -15.70-55.00 0.00\* 736.87 -79.53 113.00 -1200.00-54.00 0.00\* -1200.00 777.52 183.00 -136.52 185.01 -54.00 0.00\* -1200.00 778.70 -138.15<-- Interpolated Data \* Not Measured + Assumed Reading</pre>

\*\* BORSURV \*\* SUMMARY LITHO LOG Page 1 PROPERTY: Richardson HOLE No.: NR9618 FROM TO C.A. LITHOGICAL UNIT 0.00 34.55 OVB 34.55 37.20 Maf. Vol. (flow?) 37.20 39.70 Int. Xl Tuff 39.70 41.95 Maf. Vol. (flow?) 41.95 44.00 Mixed Maf.-Fel. Tuff 44.00 56.45 QID 56.45 59.93 Maf. Vol. 59.93 61.75 QID 61.75 63.86 Maf. Vol. 63.86 70.40 QID 70.40 72.87 Maf. Vol. (flow?) 72.87 108.40 QID 108.40 126.50 Maf. Vol. (flow?) 126.50 154.50 QID 154.50 156.58 Maf.-Int. Dyke 156.58 157.53 QID Maf. Vol. 157.53 173.88 173.88 176.44 QID 176.44 182.95 Maf. Vol. (flow?) 182.95 184.60 QID 184.60 185.01 Maf. Vol. (flow?)

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Page 1

SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

PROPERTY: Richardson HOLE NO: NR9619 GRID: Rich

DATE: 23/03/96-27/03/96 SURVEY BY: D.M.E. INSTRUMENT: Sperry Sun/Acid Test

COMMENTS: Logged by C.A.Wagg DDH drilled on claim Lot5, ConI, Richardson Twp. Drill contractor, Bradley Bros. Diamond Drilling. 

DEDEU	TNOT TNAUTON	DENDINC	FACTINCS	NODULTNCS	ሮ፣ ሮህአሞ፣ ለእ
DEPTH	THCTTHEITON	DEAKING	EVELTIGE	NOKININGS	ELEVAIION
0.00	-75.00	0.00	-650.00	-875.00	15.00
4.90	-75.00	0.00*	-650.00	-873.73	10.27
84.12	-74.00	1.00	-649.82	-852.56	-66.07
145.08	-73.00	4.00	-649.06	-835.26	-124.52
206.04	-72.50	2.00	-648.11	-817.21	-182.74
267.00	-72.00	4.00	-647.14	-798.65	-240.80
327.96	-71.00	6.00	-645.46	-779.38	-298.61
329.10	-71.00	6.00*	-645.42	-779.02	-299.69
<	Interpolated I	)ata * No	t Measured	+ Assumed	Reading

\*\* BORSURV \*\* SUMMARY LITHO LOG Page 1 PROPERTY: Richardson HOLE NO.: NR9619 FROM ΤO C.A. LITHOGICAL UNIT 0.00 3.60 OVB 3.60 17.20 Maf. Vol., fg 17.20 48.17 Maf. Vol., mg-cg, mag. 48.17 48.92 QID 48.92 63.57 Maf. Vol., mg-cg, mag. 63.57 64.42 Lapilli Tuff, (Maf.-Int.) 56 64.42 66.97 Maf. Vol., mg-cg 66.97 68.15 Felsic Dyke 68.15 104.00 Maf. Vol., mg-cg 104.00 112.22 Maf. Vol., fg, py, mag. 112.22 122.80 Qtz.-Fsp. Xl Tuff (int?) 122.80 132.70 Maf. Vol., fg 132.70 145.50 Maf. Vol., fg, black-green, mag. 145.50 146.45 Int. Xl Tuff, (+chl-biot-amph) 146.45 149.45 Maf. Vol., fg 149.45 162.50 QID 162.50 201.30 Maf. Vol. (poss. Gabbro locally) 201.30 218.70 QID 218.70 230.36 Int. QFP Intrus. 230.36 288.95 Maf.-Int. Vol., mag., py 288.95 329.10 QID

#### \*\* BORSURV \*\*

Page 1

SURVEY DATA AND CALCULATED CO-ORDINATES (metres)

PROPERTY: Richardson HOLE NO: NR9620 GRID: Rich

DATE: 27/03/96-29/03/96 SURVEY BY: INSTRUMENT: Acid Test

COMMENTS: Logged by C.A.Wagg DDH drilled on claim Lot7, ConII, Richardson Twp. Drill contractor, Ultra Mobile Diamond Drilling. ELEVATION DEPTH INCLINATION BEARING EASTINGS NORTHINGS 0.00 -55.00 0.00 -2000.00 250.00 5.00 20.42 -53.00 0.00\* -2000.00 262.00 -11.52 0.00\* 96.64 -50.00 -2000.00 309.45 -71.17 0.00\* -2000.00 -127.77 172.21 -47.00 359.52

<-- Interpolated Data \* Not Measured

+ Assumed Reading

\*\* BORSURV \*\* SUMMARY LITHO LOG Page 1 PROPERTY: Richardson HOLE No.: NR9620 TO C.A. LITHOGICAL UNIT FROM 0.00 OVB 18.40 18.40 75.00 67 QID, def,QV,py 75.00 126.60 QID 126.60 137.30 QFP Intrus. 137.30 172.21 QID

# **APPENDIX II**

# SUMMARY TABLE

# EXPLORATION EXPENDITURES STATEMENT OF COSTS

## EXPLORATION EXPENDITURES

### **Personnel**

G. Archibald; Field M P. Jones: Senior Proje Wagg Mineral Service	lanager - 10 days @ \$5 ext Geologist - 20 days es; Core logger - 28 da	00 @ \$300 ys @ \$250	5,000 6,000 8,247.77		
Damien Engelbrecht; Oscar Brunell; Core s	Student; computerizati plitter - 222 hrs @ \$17	on - /hr	3,525.28 4,751.39		
Personnel field expension	ses (meals etc)		<u>4,882.56</u>	Total	£ 22 407 00
Diamond Drilling				10181	\$ 32,407.00
Bradley Bros. March	h 1 - 15th56,219.00				
	March 16 - 31st	28,561.00			
Ultramobile.	NR96-12, 15	17,583.00			
	NR 96-12	8,500.00			
	NR 96-15, 16	16,841.00			
	NR 96-17, 18	12,726.00			
	NR 96-20	10,349.00			
Core trays		1,029.51		Total	\$151,808.51
<b>Geophysics</b>					
G. Lambert; down-hc	ole pulse EM	10,313.70			
Sperry Sun rental		1,575.00			
Magnetic susceptibilit	zy meter	1,920.55			
line cutting; 800 mete	TS	1,000.00		Total	\$ 14,809.25
<u>Assays</u>					
(assays not yet availal	ble)			Total	\$ n/a
Support Costs					
vehicles (x2)		1,250	0.00		
computer supplies, dr	afting, equip. rental	3,270	5.00		
accomodation (rental	)	2,000	00.0		
office supplies		250	0.00		
fuel, core shack heatn	ng etc .	5,000	0.00		
pnone, fax, courier		1,000	<u>0.00</u>	Total	\$ 12,776.00
		То	tal Exploration	a Costs:	\$211,800.76
		(Footage drille	ed 2,169.41 meters	s)	

Cost/meter (March, 1996) \$97.63

# **APPENDIX II**

### **SUMMARY TABLE 3**

### EXPLORATION EXPENDITURES STATEMENT OF COSTS

Drill Hole Number	Total Sample Numbers Assayed	Value <sup>1</sup>
13, 14,	367	\$8,441
19	65	\$1,495
12, 15	192	\$ 4,416
16, 17, 18	96	\$ 2,208
20	45	\$ 1,035
	TOTAL	\$17,595

<sup>1</sup> \$23/assay

# **APPENDIX III**

SUMMARY TABLES DRILL LOCATION INFORMATION

#### **Drill Hole Locations** TABLE 1

Drill Hole No.	Grid Latitude	Departure	Depth	Work Dates (March)	Location
NR-96-12 <sup>2</sup>	16+00 W	3+25 S -55°	276.45	1 - 5	Lot 6. Con. 1
NR-96-13 <sup>1</sup>	6+00 W	7+75 S -75°	474.20	3 - 10	Lot 5, Con. 1
NR-96-14 <sup>1</sup>	3+50 W	6+65 S -65°	334.00	10 - 22	Lot 5, Con. 1
NR-96-15 <sup>2</sup>	16+00 W	4+75 S -55°	191.11	5 - 15	Lot 6, Con. 1
NR-96-16 <sup>2</sup>	12+00 W	3+25 N-55°	212.50	16 - 19	Lot 6, Con. 2
NR-96-17 <sup>2</sup>	12+00 W	6+75 N-55°	$0^{3}$	20 - 22	Lot 6, Con. 2
NR-96-18 <sup>2</sup>	12+00 W	6+75 N-60°	185.01	22 - 25	Lot 6, Con. 2
NR-96-19 <sup>1</sup>	6+50 W	8+75 S -75°	323.93	23 - 27	Lot 5, Con. 1
NR-96-20 <sup>2</sup>	20+00 W	2+50 N-55°	172.21	27 - 29	Lot 7, Con. 2
			2,169.41		

<sup>1</sup> 

Drilling Company: Bradley Bros. Ltd. Drilling Company: Ultra Mobile Diamond Drilling Ltd. 2

3 Abandoned in overburden

#### TABLE 2 Meters Drilled, Richardson Township

Concession	Lot	Drill Holes	Meters	
1	Lot 5. N1/2	13.14	808.20	
1	Lot 5, S1/2	19	323.93	
1	Lot 6, W1/2	12, 15	467.56	
2	Lot 6, S1/2	16, 17, 18	397.51	
2	Lot 7, S1/2	20	172.21	
			2,169.41	

### TABLE 3Ownership

Conces	ssion Lo	t Parcel No.	]	Hectares	<b>Owner Date of Option</b>			
Con. 1 Con. 1	Lot 5, N1/2 Lot 5, S1/2	5939 5614	59.64 <u>63.94</u> 123.58	1	3/29/94			
Con. 1	Lot 6, W1/2	14407	64.74	2	8/06/93			
Con. 2	Lot 6, S1/2	17110	63.12	3	5/17/92			
Con. 2	Lot 7, S1/2	11912	63.94	4	7/01/93			
1	Jackson, B:	Route 1, Box	: 656, Wyo	ming, Ill. USA	61491			
2	Morrison, J:	11 Forest Dr.	, Bethany (	ON LOA 1A0				
3	LaFever, D:	2509 Sunrise	Lane, Burl	ington, Iowa,	USA 52601			
4	ARDA:	License of Occupatio Development Directo	License of Occupation (Agricultural Rehabilitation and Development Directorate)					

### TABLE 4 Work Applied, Richardson Township

Concession	Lot	\$ Assessment Value			
1	Lot 5, N1/2,S1/2	78,905			
1	Lot 5, S1/2	31,625			
1	Lot 6, W1/2	45,649			
2	Lot 6, S1/2	38,808			
2	Lot 7, S1/2	<u>16,813</u>			
		\$ 211,800			

# **APPENDIX IV**

GERARD LAMBERT - GEOPHYSICAL INTERPRETATION DOWN HOLE PULSE EM SURVEY



Consultation et génie-conseil en géophysique.

#### MEMORANDUM

To: George Archibald, Paul Jones, Nuinsco Resources Ltd., Emo, Ont.

From: Gerard Lambert, Consulting geophysicist, Rouyn-Noranda

Re: DOWNHOLE PULSE E.M., holes 96-07, 96-08, 96-09, 96-11, 96-13, and 96-14.

Here are a few comments about the recent downhole P.E.M. surveys carried out in these six holes in Richardson Twp. (see appended Pulse E.M. profiles at 1:2,000), between March 9 and March 13. The loop which was used had dimensions 200m by 200m, between 675W and 475W and between 875S and 675S. The X-Y probe was found to be unserviceable when the crew attempted to use it and therefore only the Z (axial) component was read. A second transmit loop was however used for detailing purposes.

#### Discussion:

<u>Hole 96-13</u>, collared at 6+00W / 7+75S, was surveyed down to 473m and the P.E.M. data shows an off-hole anomaly at 220m-225m, a signature very similar to other off-hole anomalies observed in holes 96-01, 96-03, 95-40 and 95-37. The wavelength is relatively short in comparison to the amplitude and again the conductor size appears to be limited but its conductance is fairly high.

Hole 96-14, collared at 3+50W / 6+75S was surveyed with a collar loop which was also used as an East loop for holes 96-09 and 96-13. The P.E.M. survey in hole 96-14 produced flat, non-anomalous profiles, therefore indicating that no major condutive body exists in the immediate vicinity of this hole.

The off-hole anomalies in holes 96-09 and 96-13 were also repeated with the east loop, showing similar amplitudes and wavelength. There is consequently enough electrical continuity along this conductive body toward the east, a fact which is supported by previous results from both drilling and geophysics. Based on the present results, there is no reason, from a geophysical standpoint at least, to drill other holes in the immediate vicinity of those which have been surveyed with downhole Pulse E.M. so far, because the lack of evidence for a large conductive body. The holes should be separated by distances of up to 200 meters, in order to take advantage of the searching capability of the Pulse E.M. method in exploring for a significant conductive sulphide body.

Other factors may influence these recommendations however, such as the presence of gold mineralization which may justify a tighter drilling mesh.

Should you want to further discuss any of the above points, just give me a call at (819) 762-3182.

Lambert.

Consulting Geophysicist

#### CRONE GEOPHYSICS & EXPLORATION LTD VAL D'OR GEOPHYSIQUE LTEE BOREHOLE PEM

Client	:	NUINSCO	Hole	:	NR-96-13
Grid	:	RAINY RIVER	Tx Loop	:	3
Date	:	Mar 11, 1996	File name	:	9613.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP Scale: 1:2000

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460m				- W/T/	'/ • T		+ 1
470				a <b>k</b> //	16/1	1   5	Deleiard Lambert

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#### CRONE GEOPHYSICS & EXPLORATION LTD VAL D'OR GEOPHYSIQUE LTEE BOREHOLE PEM

Client	: NUINSCO	Hole	: 3	NR-96-13
Grid	: RAINY RIVER	Tx Loop	:	4 (EAST LOOP)
Date	: Mar 12, 1996	File name	:	9613E.PEM

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#### CRONE GEOPHYSICS & EXPLORATION LTD VAL D'OR GEOPHYSIQUE LTEE BOREHOLE PEM

Client	:	NUINSCO	Hole	2	:	NR-96-14
Grid	:	RAINY RIVER	Tx I	qoop	:	4
Date	:	Mar 13, 1996	File	e name	:	9614.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP Scale: 1:2000

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# **NUINSCO RESOURCES LIMITED**

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# **Richardson Township Project**

(March 1996, Diamond Drilling Report Supplement)

# Assays

Rainy River District Kenora Mining Division N.T.S. 52 C/13 and 52D/16

C From This kport Attached connected copies is yellow + 2 copies for reports.

**Paul Jones** Project Geologist

# **APPENDIX II**

### **SUMMARY TABLE 3**

### EXPLORATION EXPENDITURES STATEMENT OF COSTS

Drill Hole Number	Total Sample Numbers Assayed	Value <sup>1</sup>	<b>A</b>
1 <b>3, 14</b> , 19	367	\$8,441 \$1.495	split up ito
12, 15	192	\$ 4,416	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
16, 17, 18	96	\$ 2,208	
20	45	\$ 1,035	

TOTAL

\$17,595

<sup>1</sup> \$23/assay

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# **APPENDIX III**

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SUMMARY TABLES DRILL LOCATION INFORMATION

### TABLE 4 Drill Hole Locations

Drill	Grid	Departure	Depth	Work	Location
Hole No.	Latitude	-	-	Dates (M	arch)
NR-96-12 <sup>2</sup>	16+00 W	3+25 S -55°	276.45	1 - 5	Lot 6, Con. 1
NR-96-13 <sup>1</sup>	6+00 W	7+75 S -75°	474.20	3 - 10	Lot 5, Con. 1
NR-96-14 <sup>1</sup>	3+50 W	6+65 S -65°	334.00	10 - 22	Lot 5, Con. 1
NR-96-15 <sup>2</sup>	16+00 W	4+75 S -55°	191.11	5 - 15	Lot 6, Con. 1
NR-96-16 <sup>2</sup>	12+00 W	3+25 N-55°	212.50	16 - 19	Lot 6, Con. 2
NR-96-17 <sup>2</sup>	12+00 W	6+75 N-55°	$0^{3}$	20 - 22	Lot 6, Con. 2
NR-96-18 <sup>2</sup>	12+00 W	6+75 N-60°	185.01	22 - 25	Lot 6, Con. 2
NR-96-19 <sup>1</sup>	6+50 W	8+75 S -75°	323.93	23 - 27	Lot 5, Con. 1
NR-96-20 <sup>2</sup>	20+00 W	2+50 N-55°	172.21	27 - 29	Lot 7, Con. 2
			2,169.41		

1

Drilling Company: Bradley Bros. Ltd. Drilling Company: Ultra Mobile Diamond Drilling Ltd. Abandoned in overburden 2

3

#### Meters Drilled, Richardson Township TABLE 5

Concession	Lot	<b>Drill Holes</b>	Meters	
1	Lot 5, N1/2,	13, 14	808.20 -	3 Split up
1	Lot 6, W1/2	19	467.56	nto N/2
2 2	Lot 6, S1/2 Lot 7, S1/2	16, 17, 18 20	397.51 <u>172.21</u> 2.169.41	5/2

#### **Drill Hole Locations** TABLE 1

Drill Hole No.	Grid Latitude	Departure	Depth	Work Dates (March)	Location
NR-96-1 $2^{2}$	16+00 W	3+25 S -55°	276 45	1 - 5	Lot 6. Con 1
NR-96-13 <sup>1</sup>	6+00 W	7+75 S -75°	474.20	3 - 10	Lot 5, Con. 1
NR-96-14 <sup>1</sup>	3+50 W	6+65 S -65°	334.00	10 - 22	Lot 5, Con. 1
NR-96-15 <sup>2</sup>	16+00 W	4+75 S -55°	191.11	5 - 15	Lot 6, Con. 1
NR-96-16 <sup>2</sup>	12+00 W	3+25 N-55°	212.50	16 - 19	Lot 6, Con. 2
NR-96-17 <sup>2</sup>	12+00 W	6+75 N-55°	$0^{3}$	20 - 22	Lot 6, Con. 2
NR-96-18 <sup>2</sup>	12+00 W	6+75 N-60°	185.01	22 - 25	Lot 6, Con. 2
NR-96-19 <sup>1</sup>	6+50 W	8+75 S -75°	323.93	23 - 27	Lot 5, Con. 1
NR-96-20 <sup>2</sup>	20+00 W	2+50 N-55°	172.21	27 - 29	Lot 7, Con. 2
			2,169.41		

1

Drilling Company: Bradley Bros. Ltd. Drilling Company: Ultra Mobile Diamond Drilling Ltd. Abandoned in overburden 2

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#### TABLE 2 Meters Drilled, Richardson Township

Concession	Lot	<b>Drill Holes</b>	Meters
1	Lot 5. N1/2	13.14	808 20
1	Lot 5, S1/2	19	323.93
1	Lot 6, W1/2	12, 15	467.56
2	Lot 6, S1/2	16, 17, 18	397.51
2	Lot 7, S1/2	20	172.21
			2,169.41

Conces	ssion Lot	Parcel No.	]	Hectares	Owner Date of Option
Con. 1 Con. 1	Lot 5, N1/2 Lot 5, S1/2	5939 5614	59.64 <u>63.94</u> 123.58	1	3/29/94
Con. 1	Lot 6, W1/2	14407	64.74	2	8/06/93
Con. 2	Lot 6, S1/2	17110	63.12	3	5/17/92
Con. 2	Lot 7, S1/2	11912	63.94	4	7/01/93
1	Jackson, B:	Route 1, Box	656, Wyo:	ming, Ill. US.	A 61491
2	Morrison, J:	11 Forest Dr.	, Bethany (	ON LOA 1AO	)
3	LaFever, D:	2509 Sunrise	Lane, Burl	ington, Iowa,	USA 52601
4	ARDA:	License of Occupation Development Directo	n (Agricul rate)	tural Rehabilit	ation and

### TABLE 3Ownership

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 TABLE 4
 Work Applied, Richardson Township

Concession	Lot	<b>\$</b> Assessment Value
1	Lot 5, N1/2,S1/2	78,905
1	Lot 5, S1/2	31,625
1	Lot 6, W1/2	45,649
2	Lot 6, S1/2	38,808
2	Lot 7, S1/2	<u>16,813</u>
		\$ 211,800

# W9610. 00056

# **APPENDIX I**

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# **EXPLORATION DATA**

# DIAMOND DRILL HOLE LOGS



#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9616 Collar Eastings: -1200.00 Collar Northings: 300.00 Collar Elevation: 9.00 Grid: Rich

Collar Inclination: -55.00Logged by: C.A. WaggGrid Bearing: 360.00Date: 16/03/96-19/03/96Final Depth: 212.44 metresDown-hole Survey: Sperry Sun/Acid TestDDH drilled on claim Lot6,ConII, Richardson Twp.Drill contractor, Ultra Mobile Dia

ASSAYS FROM LITHOLOGICAL DESCRIPTION FROM TO WIDTH Auppolo Cuppen Znppen Agpen Polppen Coppen Nippen Ptppb Polppb to 12.05 OVERBURDEN (OB) - casing. 0 12.05 19.6 PORPHYRITIC MAFIC VOLCANICS (Porphyr. Maf. Vol.) -15.10 15.47 0.37 30.000 245.000 NIL 0.200 NIL NIL 66.000 NIL NIL medium-coarse grained. Medium-dark grey green. Spotted with 5% white-grey subhedral feldspar phenocrysts, averaging about 1cm in diameter, but rarely to 3-4cm. 50-60% fine-med, grained groundmass fsp. 30-40% fine green amphibole +/- minor Chl. 3-5% fine black altered pyroxenes, locally to 5-10%. 1-2% altered olivine phenocrysts < 2mm. Trace qtz, likely as a result of alteration. ALTERATION: Weak-mod. pervasive calcite alteration Moderate sausseritization of groundmass feldspar. Phenocrysts likely albitized. 3-4% fine-med. grained disseminated Py. Weakly magnetic in places. STRUCTURE: Moderately foliated at 60-70 to CA. 15.08-15.37, < 5mm wide calcite > qtz > Po stringer. ALTERATION: 7-8% disseminated Py < 1% Po over interval. STRUCTURE: Stringer < 5 to CA.

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#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9616

									ASSAY	S				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn pprn	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		17 75 to 10 %. Disponsively englished pyrovenes fresher												
		and constitute 5,10% of pock Conundman constally finan												
		and constitute 5-10% of rock. Groundmass generatly finer												
		and less altered as well.												
		ALTERATION: Same as above, weaker alteration.												
		STRUCTURE: Foliation 65-70 to CA.												
		COMMENTS: Interval with Po sampled for copper and nickel.												
19.6	36.64	POST-TETONIC FINE GABRED INTRUSIVE (Post-tetonic Gabbro Intrus.) -												
,,,,,,	20101	fine grained. Medium grev-green. Technically porphyritic with												
		2-3% < 2mm black pyrovene phenocrysts linfoliated 70-80%												
		fine plagioclase most lath-like. Total pyroxene 5-7%. Trace												
		1% altered oliving as round phenocrysts, now serpenting, rarely to												
		3mm. 10-20% fine green to black amphibole. Mafic silicates												
		locally all pyroxene, no amphibole.												
		· · · · · · · · · · · · · · · · · · ·												
		ALTERATION: Weakly-moderately magnetic in most places.												
		1-2% fine disseminated Py, trace 1% very fine magnetite.												
		•												
		STRUCTURE: Unfoliated, moderately fractured < 1/30cm												
		on average, many at 50-60 to CA. Many with Chl +/- calcite												
		cement. Both contacts chilled over several cm, and foliation												
		parallel at 65-70 to CA.												
		•												

50.59 51.75 1.16 30.000 106.000 250.000

# DIAMOND DRILL LOG

LITHOLOGICAL DESCRIPTION τo FROM TO WIDTH Auppeb Cuppen Znppen Agppen Polppen Coppen Nippen Ptppb Polppb FROM COMMENTS: Whole rock samples at 17, 21, 28, 31, 39m. QTZ EYE DACITE CRYSTAL TUFF (QID, fg) -39.64 44.6 fine grained, light grey. < 1% sm.-med. sized, 1-3mm, dark grey qtz eyes. 5-10% mafic silicates, most as tiny lenses of amphibole +/- Chl and qtz up to 2x 8mm, probably the result of breakdown of "eye-sized" mafic lapilli. Fragments are larger, up to 5 x 15mm, and mafic minerals present within groundmass below 43.25. ALTERATION: 1-2% fine disseminated Py. Weakly bleached, weakly-moderately sericitized. 1~3mm wide seams of Chl +/-Py reseal some subconcordant to crosscutting fractures.

STRUCTURE: Foliation 70-75 to CA, rarely to 80.

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COMMENTS: 3-4% qtz eyes up to .8 x 1.5cm over lowermost metre of interval.

44.6 52.5 MAFIC METAVOLCANICS (Maf. Vol., fg-mg) fine-med. grained. Med.-dark green. Thoroughly altered for several metres at both contacts. Probably intrusive in part.

> ALTERATION: Moderately chloritized mafic silicates, feldspar sausseritized. Weak pervasive calcite alteration. Calcite +/- Py resealing fractures as hairline, 5mm wide

ASSAYS

0.700

4.000

NIL

NIL

NIL

NIL

#### DIAMOND DRILL LOG

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									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		fillings.												
		·												
		by c 5 despect. Well fractured with some sections												
		broken enough to be called usaking braceisted												
		bioken enough to be catted weakly biotchated.												
		46.25 to 48.50: Least altered weakly foliated interval.												
		Resembles coarse massive flow or a fine gabbro 30-45%												
		subhedral-euhedral whitish plagioclase < 1mm. 50-60%												
		fine green amphibole, partly chloritized. 1-2% minute												
		unaltered? black pyroxene, possibly enclosed within amphibole.												
		•												
		ALTERATION: Weakly magnetic throughout. Strongest where												
		it is least altered. Gabbroic interval 2-3% very fine disseminated												
		magnetite, from alteration? 3-4% fine-med. grained disseminated												
		Py. Up to 7-8% dissemination to fracture controlled Py,												
		within well altered portions.												
		STRUCTURE: Somewhat banded, 1-5cm scale, due to dominantly												
		subconcordant calcite filled fractures, and variation in												
		abundance and degree of alteration of plagioclase.												
		Neither contact appears chilled. Lower contact foliation parallel												
		85 to CA.												
2.5	56.9	QTZ EYE DACITE CRYSTAL TUFF (QID, fg-mg) -	54.37	54.66	0.29	10.000	16.000	90.000	0.200	16.000	NIL	NIL	NIL	NIL
		similar to interval from 39.64-44.6, but with 2-3%, smmed. sized								-				
		gtz eves, and without the clusters of mafic silicates.												

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#### DIAMOND DRILL LOG

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									ASSAY	s					
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
		<ul> <li>ALTERATION: Feldspars sausseritized for top 10cm of interval.</li> <li>Weakly sericitized throughout. 1-2% fine disseminated Py.</li> <li>5-10 medium sized disseminated Py over lowermost</li> <li>.45m.</li> <li>.</li> <li>STRUCTURE: Weakly foliated at 70-80 to CA.</li> <li>.</li> <li>54.4 to 54.55: Crosscutting irregular walled qtz vein with non-parallel contacts.</li> <li>.</li> <li>ALTERATION: Minor Chl, calcite. 5% black tourmaline,</li> </ul>													
		1% Py, tr Cp, 2-3% k-spar. Wallrock sausseritized over 5-10cm. STRUCTURE: Both contacts average 30-40 to CA. Local foliation 75 to CA.													
56.9	130.6	ALTERED MAFIC METAVOLCANICS (Altered Maf. Vol.) - likely intrusive in part. Medium-dark green. Fine-med. grained. Similar to interval from 44.6-52.5. Gabbroic in appearance where coarsest, but strongly altered throughout. ALTERATION: Py content variable, ranging from 1-2% up to 7-8% over .5m long intervals. Weak to strong calcite chlorite epidote alteration and sausseritization present theorement.	60.29 71.39 78.86 89.44 94.25 94.75 102.71	60.56 72.20 79.47 89.96 94.75 95.42 103.22	0.27 0.81 0.61 0.52 0.50 0.67 0.51	20.000 10.000 20.000 50.000 15.000 10.000 135.000	67.000 17.000 61.000 23.000 80.000 21.000 104.000	88.000 158.000 115.000 102.000 50.000 55.000 90.000	0.300 NIL 0.400 NIL NIL 0.200 0.800	1.000 NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL NIL	

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#### DIAMOND DRILL LOG

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									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		STRUCTURE: Well foliated at 70-75 to CA. Amphibolite?												
		56.9 to 57.17: Fine grained, strongly chloritized, moderately banded. Weakly sheared?												
		ALTERATION: 3-4% fine-med. grained disseminated Py.												
		STRUCTURE: Contact 88 to CA.												
		57.17 to 58.01: Qtz eye dacite. Similar to interval from 52.5- 56.9.												
		ALTERATION: 1-2% fine disseminated Py.												
		STRUCTURE: Foliation 75-80 to CA. Lower contact offset												
		by fracturing, appears to be foliation parallel.												
		58.01 to 61.29: Same as 56.9-57.17.												
		61.29 to 61.48: Dacite inclusion?												
		ALTERATION: Moderately k-spar altered.												
		STRUCTURE: Subconcordant to fracture controlled contacts.												
		61.9 to 62.1: Dacite inclusion, no k-spar.												

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#### DIAMOND DRILL LOG

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									ASSAY	s				
FROM 1	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		ALTERATION: 1-2% fine Py.												
		61.48 to 64.0: Resembles fine grained gabbro. Magnetite												
		content and grain size increasing with depth.												
		ALTERATION: Moderately chloritized. Weak calcite and												
		epidote/sausserite alteration. 5-7% fine disseminated magnetite												
		on average.												
		STRUCTURE: Foliation 75-80 to CA.												
		•												
		64.0 to 67.25: Porphyritic Gabbro. 2-3% altered fsp phenocrysts												
		present occasionally exceeding 1cm in diameter.												
		ALTERATION: Phenocrysts weakly sausseritized. Groundmass												
		fsp moderately epidote sausserite altered. 10-15% disseminated												
		magnetite 1-2mm in diameter. 1-3% fine disseminated Py.												
		Weak chloritization of amphiboles.												
		• 67.25 to 71.75: Medcoarse grained. Strongly altered with up to												
		15%+ coarse grained disseminated magnetite, up to 4mm												
		in diameter.												
		ALTERATION: 3-4% disseminated Py. Strong epidote												
		sausserite alteration. Weak chloritization.												
		STRUCTURE: Enliption weak 65-75 to CA												

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#### DIAMOND DRILL LOG

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FROM       TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppm       Pb ppm       Co ppm       Ni         71.75       to 88.5:       Qtz       Gabbro to Diorite.       Medium grained       with 7-8% fine disseminated magnetite, and on average       4-6% smmed. sized deep blue qtz eyes. Up to 10%       qtz eyes, locally over 10-30cm.       -         . <th>ippın Ptppb Pdppb</th>	ippın Ptppb Pdppb
71.75 to 88.5: Qtz Gabbro to Diorite. Medium grained with 7-8% fine disseminated magnetite, and on average 4-6% smmed. sized deep blue qtz eyes. Up to 10% qtz eyes, locally over 10-30cm. - ALTERATION: 3-5% fine-med. grained disseminated Py, to 8-10% locally over .5m. Weak-moderate chlorite and epidote-sausserite alteration. - STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally. - 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and etz wise from 80.089.69 (and 96.359.35)	
<pre>with 7-8% fine disseminated magnetite, and on average 4-6% smmed. sized deep blue qtz eyes. Up to 10% qtz eyes, locally over 10-30cm. ALTERATION: 3-5% fine-med. grained disseminated Py, to 8-10% locally over .5m. Weak-moderate chlorite and epidote-sausserite alteration. STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally.</pre>	
4-6% smmed. sized deep blue qtz eyes. Up to 10% qtz eyes, locally over 10-30cm. ALTERATION: 3-5% fine-med. grained disseminated Py, to 8-10% locally over .5m. Weak-moderate chlorite and epidote-sausserite alteration. STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally. 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and otz vaine from 80.0.89 (and 96.4 and 96.4 app 55.5	
<pre>qtz eyes, locally over 10-30cm. ALTERATION: 3-5% fine-med. grained disseminated Py, to 8-10% locally over .5m. Weak-moderate chlorite and epidote-sausserite alteration. STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally. 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.895.87</pre>	
ALTERATION: 3-5% fine-med. grained disseminated Py, to 8-10% locally over .5m. Weak-moderate chlorite and epidote-sausserite alteration. STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally. 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and otz veine from 80.0.89 (and 94 card	
Py, to 8-10% locally over .5m. Weak-moderate chlorite and epidote-sausserite alteration. STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally. 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and otz vaine from 89.0-89 4 ent 96 4-95 35	
and epidote-sausserite alteration. STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally. 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.80-78.67, and otz vaine from 80.0-84 card 84 card 84 card 85 card	
STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally. 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and otz vaine from 80.0-89.4 and 94.3-95.35	
STRUCTURE: Contact, if there is one, coincident with fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally.	
fracture controlled qtz stringer at 40 to CA. Up to 10-12% magnetite locally. 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and otz vaine from 80.0.89 (and 94.3-05.35)	
magnetite locally. 88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and otz veine from 89.0.89 4 and 94.3-95.35	
88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and otz veine from 80.0.89 (and 94.3-05.35)	
88.5 to 111.79: Single unaltered phenocryst at 86.4m. Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and otz vaine from 80.0.89 (and 94.4.205.35)	
Similar to interval from 61.48-64.0. Includes two qtz gabbro dykes from 97.45-97.17 and 97.89-98.67, and gtz vaige from 89.0.89.4 and 94.3-95.35	
gabbro dykes from 97.45-97.17 and 97.89-98.67, and	
atz vaine from 80 A-80 4 and 94 3-95 35	
que tente in orio 07.0 07.4 dite 74.3 77.3.	
ALLEKALUM: 2-34 OISSEMILALED PY ON AVERAGE.	
discriminated magnetile above yold. 3-34	
disseminated magnetite bettom 75.57. Venis concerning	
Without citorite and catorie, the W consistence and a rew	
A k-sper in the target vent.	
REVIEWRE: Foliation 70-80 to CA. Dyke contacts	
marked by abruot, over several cm, change in grain size	
and appearance of gtz eyes.	
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### DIAMOND DRILL LOG

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									ACCAV	-				
								_	ASSAT	s 				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cuppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Nippm	Pt ppb	Pd ppb
		COMMENTS: tourmaline cluster, partly within chlorite												
		over 3cm in diameter at 94.65.											•	
		107 07 to 107 14. Denite inclusion? with scheensordent												
		105.02 to 105.10: pacite inclusion? with subconcordant												
		contacts.												
		•												
		ALTERATION: Trace 1% Py, tr Cp.												
		STRUCTURE: Foliation 70 to CA.												
		103 / 7 to 105 05. Since ensigned sty over depite equatel												
		105.47 to 105.95: Fine grained qtz eye dacite crystal												
		tuff with rare matic lapilli to 1 x 5mm. Resembles												
		39.64-44.6.												
		ALTERATION: 1-2% fine disseminated Py within												
		tuff subintervals.												
		STRUCTURE: Subconcordent contacts, almost foliation												
		parallel. Follation 65-70 to CA at lower contact.												
		109.40 to 110.2: Trace qtz eyes, for ash tuff.												
		STRUCTURE: Upper contact foliation parallel 75-80												
		to CA. Lower contact coincident with subconcordant												
		atz stripger												
		der genutzen.												
		111./Y TO 114.01: Same as 109.4-110.2.												
		•												

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#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9616

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									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Соррт	Ni ppm	Pt ppb	Pd ppb
		STRUCTURE: Foliation 75 at top contact. 65 at lower												
		contact.												
		114.81 to 130.6: Fine-med. grained gabbro with 3-5%												
		fine dissemination magnetite. Resembles 61.48-64.0.												
		Maximum grain size from 126-128m. Including 121-												
		121.45. Green-brown in colour, medium grained, contains												
		< 20% fine biotite. Apparently a concordant well altered												
		pyroxene gabbro dyke.												
		ALTERATION: Moderate chloritization and epidote-												
		sausserite alteration.												
		STRUCTURE: Foliation 70-90 to CA averaging 75-80.												
170 4	1/2 22	OID (OID fa) fine project 2.7% on and size at aver												
130.0	142.22	Fine crystal tuff Dessibly significant ash component												
		above 135m.												
		•												
		ALTERATION: 1-3% fine disseminated Py, weakly												
		sericitized.												
		-												
		STRUCTURE: Foliation 70-75 to CA at top contact.												
		opriv to that issue, ruris to the below IS8.5m.												
		139.1 to 139.95: Mafic lapilli tuff ? 50% chlorite,												
		50% calcite, apparently six discrete horizons, three												

#### DIAMOND DRILL LOG

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								ASSAYS	5				
FROM TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
	consisting of fine grained mafic crystal tuff.												
	ALTERATION: Strong-intense Chl-calcite alteration.												
	STRUCTURE: Banded to spotted with lineated cigar												
	shaped chloritic lapilli ?separated by calcitic matrix.												
	Foliation 80-85 to CA, foliation parallel contacts.												
142.22 155.5	ALTERED MAFIC METAVOLCANICS (Altered Mat. Vol.) -												
	similar to much of previous thick matic intersection.												
	Banded, spotted with disseminated magnetite. Whitish												
	phenocrysts present in places. Finest, and generally most												
	altered at margins. Resembles 56.9-130.6, but finer grained												
	and without the qtz eye gabbro unit.												
	ALIERATION: MODERATELY magnetic throughout. Calcite												
	cementing fractures. Hoderate chloritization, weak calcite												
,	alteration throughout.												
	CTRUCTURE, Enlisting 70.80 to CA												
	STRUCTURE: FULTACION /0-00 CO CA.												
155.5 159.78	QID (QID) - similar to interval from 130.6-142.22. 7-8%												
	smlg. qtz eyes 8mm diameter. Fine crystal groundmass above												
	158.8. Below 158.8. Ash groundmass with < 1% med. lg. eyes.												
	ALTERATION: < 1% fine disseminated Py. Weakly												

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#### DIAMOND DRILL LOG

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FROM	то	LITHOLOGICAL DESCRIPTION sericitized.	FROM	то	WIDTH	Au ppb	Cuppm	Zn ppm	ASSAYS Agippm	Pbppm	Coppm	Nippm	Pt ppb	Pd ppb	
		STRUCTURE: Margins and interval contact foliation parallel sharp, 75-80 to CA.													
159.78	163.7	ALTERED MAFIC INTRUSIVE? (Altered Mafic Intrus.) - possibly tuffaceous. Similar to interval from 44.6-52.5. Composed principally of qtz eye gabbro, fine grained. Gradational lower contact into intermediate ash tuff.													
		ALTERATION: 3-4% fine disseminated magnetite. 3-4% fine- med. grained disseminated Py. Moderately Chl calcite altered. STRUCTURE: Foliation 75-80 to CA. Top contact foliation parallel. Lower contact gradational over 10-20cm.													
163.7	165.05	INTERMEDIATE QTZ EYE ASH TUFF (QID, fg) - fine grained, medium grey-green. Well foliated, weakly banded. 5% calcite +/- qtz stringers fracture controlled. 1-2% small qtz eyes. Groundmass, would be "dacitic" except that colour suggests it is about 30% very fine chlorite. ALTERATION: 5-7% Py, mostly along fractures, with or without calcite. Sp present along fracture < 2mm wide at 164.7.	163.68 164.64	164.64 164.85	0.96 0.21	80.000 240.000	300.000 1 730.000 2	860.000	4.000 6.600	5.000 13.000	NIL NIL	NIL Nil	NIL NIL	NIL NIL	

COMMENTS: 3cm of qtz eye crystal tuff at lower contact.

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									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nippm	Pt ppb	Pd ppb
165.05	173.7	INTERMEDIATE ASH TUFF (Intermediate Ash Tuff) -	164.85	165.72	0.87	495.000	335.000	950.000	5.000	13.000	NIL	NIL	NIL	NIL
		similar to above interval but for absence of qtz eyes.	165.72	166.23	0.51	160.000	230.000	800.000	2.900	18.000	NIL	NIL	NIL	NIL
		Strongly fractured with calcite +/- sulphide fillings	166.23	166.58	0.35	2480.000	335.000	2600.000	5.000	30.000	NIL	NIL	NIL	NIL
		and a few mm of chloritized wallrock at contacts.	166.58	167.75	1.17	65.000	215.000	360.000	2.400	11.000	NIL	NIL	NIL	NIL
		Fractures subconcordant to crosscutting and contorted.	167.75	168.41	0.66	80.000	245.000	NIL	2.700	NIL	NIL	94.000	NIL	NIL
		3-5% calcite fracture fillings.	168.41	168.76	0.35	30,000	355.000	NIL	2.000	NIL	NIL	59.000	NIL	NIL
			168.76	169.53	0.77	35.000	240.000	215.000	1.600	6.000	NIL	NIL	NIL	NIL
		ALTERATION: 4-5% Py on average up to 7-8% over	169.53	170.12	0.59	30.000	275.000	293.000	2.300	6.000	NIL	NIL	NIL	NIL
		.5m. Moderate pervasive calcite alteration. Pure	170.12	170.82	0.70	50.000	375.000	294.000	4.500	5.000	NIL	NIL	NIL	NIL
		calcite fillings up to 2 x 4cm in places. < 1% Sp in calcite-												
		Py stringers from 166.25-166.58. Py, tr Po along												
		stringer at 168m. 2-3% Po over 30cm at 168.5 in												
		and adjacent to narrow? ov with subconcordant top												
		contact. Lower contact $\leq 20$ to CA.												
		STRUCTURE: Rended probably due to primary												
		compositional variation Ediation 75-80 to CA												
		compositional valiation, foliation 13-00 to tk.												
		Lower contact forfaction parallel.												
173.7	177.5	QID (QID. fg) - very similar to interval from 155.5-159.78.												
		1-2% eves, fine crystal groundmass above 176.25; trace												
		eves ash anoundmass below 176.25. Grades into												

intermediate ash tuff at about 177.5.

ALTERATION: Trace 1% fine Py.

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DIAMOND DRILL LOG

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\_\_\_\_\_\_ ASSAYS WIDTH Auppolo Cuppor Znppon Agippon Polopon Coppon Nippon Ptppolo Polopolo LITHOLOGICAL DESCRIPTION FROM TO FROM TO STRUCTURE: Well foliated at 80-85 to CA. COMMENTS: Lower contact somewhat arbitrary. 177.5 187.93 INTERMEDIATE ASH CRYSTAL TUFF (Inter. Ash Crystal Tuff) similar to interval from 165.05-173.7. Grades into crystal size groundmass at around 183.5. ALTERATION: 3-4% Py locally to 5-7% over 30cm where calcite filled fractures are abundant. STRUCTURE: Foliation 60-85 to CA. 187.93 193.8 FINE QTZ EYE CRYSTAL TUFF (QID, fg) -Very similar to interval from 173.7-176.25. 3-4% sm.-med. sized eyes. ALTERATION: Weakly bleached, sericitized, < 1% Py. STRUCTURE: Foliation weak 75-85 to CA. 193.8 208.58 BRECCIATED ALTERED INT. ASH TUFF (Brecciated Alt. Int. Ash Tuff) -NIL NIL NIL NIL 204.13 205.16 1.03 30.000 120.000 195.000 0.500 NIL NIL NIL NIL NIL NIL or more likely poorly sorted coarse fragmental. Similar 207.39 208.00 0.61 25.000 164.000 158.000 0.300 in colour, composition and texture to interval from 165.05-

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### DIAMOND DRILL LOG

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									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ní ppm	Pt ppb	Pd ppb
		173.7, except for < 5mm wide subconcordant chlorite rich												
		"seams" separating peoble to bomb sized fragments?												
		Appears somewhat sheared in places, possibly due to												
		concentration of smaller fragments now < 1cm in thickness.												
		- ALTERATION: Calcite filled fractures common to abundant.												
		Groundmass strongly chloritized. 7-8% calcite fracture												
		fillings, mostly randomly oriented, often interconnected,												
		breccia-like. 2-3% fine disseminated Py. 1-2% very fine												
		disseminated magnetite.												
		• STRUCTURE: Foliation 70-80 to CA. Contacts sharp												
		foliation parallel.												
		CUMMENIS: Unioritic seams appear more likely to be												
		mud and ash, interstitiat to fragments rather than												
		alteration along fractures. Fragments commonly 1-30m												
		thick farely over 5cm.												
		207.03 to 207.45: Shattered interval of fine qtz eye dacite tuff.												
		• ALTERATION: Weak bleaching, minor calcite along												
		hairline fractures. Trace 1% Pv.												
208.58	212.44	FINE QTZ EYE DACITE CRYSTAL TUFF (QID, fg) -												
		similar to interval from 187.93-193.8. Somewhat banded due to												
		bleaching along subconcordant fractures. < 5% fine mafic												

### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9616

																		-
												ASSAY	s					
FROM	TO	LITH	OLOGICAL DESCRIP	TION		FROM	TO	WIDTH	Au ppb	Cu ppm	Znppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
		silicates, prim	arily chlorite.															
		• ALTERATION: 1-2	% fine dissemina	ted Py.														
		• STRUCTURE: Folio	ation parallel c	ontact. Foliat	ion 65-80 to CA.													
		75-80 to CA at 1	242.4.															
		DO	WN-HOLE SURVEY DA	ATA														
		DEPTH	INCLINATION	BEARING														
		32.60	-54.00	3.00														
		93.60	-53.50	357.00														
		154.50	-52.00	9.00														
		209.40	-50.00	6.00														
		212.44	-50.00															

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9617 Collar Eastings: -1200.00 Collar Northings: 675.00 Collar Elevation: 15.00 Grid: Rich Drill contractor, Ultra Mobile Diamond Drilling

Collar Inclination: -50.00 Grid Bearing: 0.00 Final Depth: 35.00 metres Abandoned in overburden. Logged by: C.A. Wagg Date: 20/03/96-22/03/96 Down-hole Survey: Acid Test DDH drilled on claim Lot6,ConII, Richard

# ASSAYS FROM TO LITHOLOGICAL DESCRIPTION FROM TO WIDTH DOWN-HOLE SURVEY DATA

DEPTH INCLINATION BEARING

35.00 -55.00

.

#### DIAMOND DRILL LOG

**PROPERTY:** Richardson HOLE No.: NR9612 Collar Eastings: -1600.00Collar Northings: -325.00 Collar Elevation: 0.00 Grid: Rich

0

Collar Inclination: -55.00 Logged by: C.A. Wagg Grid Bearing: 0.00 Date: /03/96-09/03/96 Final Depth: 276.45 metres Down-hole Survey: Acid Test/Sperry Su DDH drilled on claim Lot6, ConI, Richardson Twp. Drill Contractor Ultra Mobile Di

ASSAYS FROM то LITHOLOGICAL DESCRIPTION FROM τo WIDTH Auppho Cuppin Zn.ppm. Agippin Pb.ppm. Coppin Nippin Pt.ppb. Pd.ppb. 35.67 OVERBURDEN (OB) -35.67 264.96 QID (QID, fg-mg) - Fine to medium grained, light grey, 37.35 37.85 0.50 45.000 30.000 80.000 0.800 NIL NIL NIL NIL NIL commonly spotted with 5-20% disseminated. crystalline 37.85 38.89 1.04 105.000 165.000 96,000 3.400 NIL NIL NIL NIL NIL 3.000 calcite, less than or equal to 2mm. Contains 1-3% 38.89 39.16 0.27 190.000 620.000 330.000 4.600 NIL NIL NIL NIL generally small qtz eyes. Deeply weathered and 45.45 45.83 0.38 40.000 18.000 145.000 1.600 58,000 NIL NTL NTE NIL 25.000 vuggy in places above 43.3m. 52.00 52.38 0.38 15.000 125.000 1.000 76,000 NTI NTL NTI NIL 54.57 55.04 0.47 195.000 51.000 4600.000 82.000 3450.000 NIL NIL NIL NIL ALTERATION: 1-2% fine disseminated. Py. 55.04 56.10 1.06 335.000 40.000 1750.000 38.000 540.000 NIL NIL NIL NIL 56.10 56.85 0.75 50.000 28,000 260,000 5.000 46,000 NIL NIL NIL NTL STRUCTURE: Weakly-mod banded due to 56.85 58.13 1.28 20,000 21.000 261.000 2,500 24.000 NIL NIL NIL NIL concentration of Chl +/- sericite along foliation 58.13 59.03 0.90 20,000 18.000 168.000 2.000 15.000 NIL NIL NIL NIL parallel to subconcordant slips/fractures. 59.03 60.04 1.01 25.000 25.000 241.000 1.700 18.000 NIL NTL NIL NIL Foliation 70-80 to CA, averaging 70-75 to CA. 76.55 77.55 1.00 35.000 33.000 228.000 2.000 18.000 NIL NIL NIL NIL 77.55 78.01 0.46 20,000 22.000 1250.000 1.600 12,000 NIL NIL NIL NIL 37.50 to 37.8: concordant? 78.01 78.42 0.41 NIL 112.000 104.000 0.700 6.000 NIL NIL NIL NIL qtz vein. Top 15cm broken and partly ground. 78.42 78.89 0.47 60.000 160.000 378.000 40.000 3.500 NTI NIL NIL NIL Contains calcite open space fillings, and 1-2% 78.89 79.67 0.78 80.000 32.000 350.000 5.500 3,000 NIL NIL NIL NIL masses of black amph. +/- tourm. 84.43 85.59 1.16 70.000 20.000 198.000 0.600 4.000 NIL NIL NIL NIL 85.59 86.51 0.92 145.000 8.000 126.000 0.300 2.000 NIL NIL NIL NTL

86.51

92.65

99.57 100.45

87.58

93.09

1.07 270.000

12.000

0.44 550,000 590.000 1030.000

0.88 240.000 62.000 106.000

44.000

0.200

4.200

1:000

NIL

72.000

11.000

NIL

ALTERATION: tr. 1% Py.

STRUCTURE: Foliation below 43.80, generally

HOLE No: NR9612

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#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

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								ASSAY	S					
TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
	65 to CA.	100.45	101.70	1.25	315.000	23.000	70.000	0.300	23.000	NIL	NIL	NIL	NIL	
		101.70	101.95	0.25	3380.000	970.000	5300.000	18.200	600.000	NIL	NIL	NIL	NIL	
	39.05: 25cm wide subconcordant to crosscutting vein.	101.95	102.72	0.77	580.000	240.000	500.000	5.000	82.000	NIL	NIL	NIL	NIL	
		102.72	103.59	0.87	575.000	122.000	300.000	6.000	53.000	NIL	NIL	NIL	NIL	
	ALTERATION: 1% Py, tr. Cp Gn.	103.59	104.00	0.41	590.000	60.000	1800.000	6.400	160.000	NIL	NIL	NIL	NIL	
		104.00	105.14	1.14	75.000	10.000	69.000	0.400	11.000	NIL	NIL	NIL	NIL	
	STRUCTURE: Top contact approx. 45 to CA.	105.14	105.77	0.63	30.000	22.000	165.000	0.800	8.000	NIL	NIL	NIL	NIL	
	Lower contact averages 20 to CA.	105.77	106.67	0.90	70.000	28.000	178.000	1.200	8.000	NIL	NIL	NIL	NIL	
		106.67	107.35	0.68	70.000	32.000	235.000	1.200	10.000	NIL	NIL	NIL	NIL	
	42.5: Very vuggy, 5-7cm wide concordant qtz	107.35	107.62	0.27	45.000	18.000	37.000	0.800	120.000	NIL	NIL	NIL	NIL	
	calcite vein.	107.62	108.81	1.19	50.000	22.000	65.000	0.300	75.000	NIL	NIL	NIL	NIL	
		108.81	109.61	0.80	50.000	32.000	140.000	0.200	47.000	NIL	NIL	NIL	NIL	
	ALTERATION: 1% Py ? most on walls of vugs.	109.61	110.53	0.92	70.000	90.000	190.000	0.700	53.000	NIL	NIL	NIL	NIL	
		110.53	111.63	1.10	110.000	82.000	370.000	5.700	206.000	NIL	NIL	NIL	NIL	
	44.6-45.0: Weakly-mod. bleached with	111.63	111.86	0.23	165.000	42.000	720.000	3.500	325.000	NIL	NIL	NIL	NIL	
	discontinuous Py band to 1.5cm wide with minor	111.86	113.30	1.44	135.000	72.000	216.000	3.800	55.000	NIL	NIL	NIL	NIL	
	qtz-calcite at 44.85.	113.30	114.09	0.79	60.000	72.000	680.000	3.800	103.000	NIL	NIL	NIL	NIL	
		114.09	114.90	0.81	135.000	144.000	6300.000	9.000	310.000	NIL	NIL	NIL	NIL	
	STRUCTURE: vein and sulphides subconcordant.	114.90	115.38	0.48	65.000	72.000	2400.000	4.700	225.000	NIL	NIL	NIL	NIL	
	•	115.38	115.98	0.60	165.000	430.000	4800.000	25.000	1000.000	NIL	NIL	NIL	NIL	
	Below 48m: 1-3% calcite crystals on average.	115.98	116.42	0.44	1570.000	8600.0002	1600.000	566.000	9650.000	NIL	NIL	NIL	NIL	
	No weathered/ vuggy sections.	116.42	116.96	0.54	170.000	155.000	2300.000	6.700	190.000	NIL	NIL	NIL	NIL	
		116.96	117.34	0.38	170.000	180.000	1350.000	2.600	262.000	NIL	NIL	NIL	NIL	
	ALTERATION: At 54.60, 55.0, small 1x 2-3cm	117.34	117.59	0.25	930.000	670.000	4100.000	11.000	830.000	NIL	NIL	NIL	NIL	
	patches of remobilized qtz-calcite Py with minor	117.59	118.00	0.41	210.000	80.000	620.000	1.400	182.000	NIL	NIL	NIL	NIL	
	Galena.	118.00	118.49	0.49	400.000	970.000	6350.000	6.400	870.000	NIL	NIL	NIL	NIL	
		118.49	119.32	0.83	180.000	270.000	1900.000	1.500	62.000	NIL	NIL	NIL	NIL	
	STRUCTURE: Foliation 70-75 to CA at 50.5m.	119.32	120.03	0.71	215.000	92.000	1400.000	1.400	32.000	NIL	NIL	NIL	NIL	
	το	TO LITHOLOGICAL DESCRIPTION 65 to CA. 39.05: 25cm wide subconcordant to crosscutting vein. ALTERATION: 1% Py, tr. Cp Gn. STRUCTURE: Top contact approx. 45 to CA. Lower contact averages 20 to CA. 42.5: Very vuggy, 5-7cm wide concordant qtz calcite vein. ALTERATION: 1% Py ? most on walls of vugs. 44.6-45.0: Weakly-mod. bleached with discontinuous Py band to 1.5cm wide with minor qtz-calcite at 44.85. STRUCTURE: vein and sulphides subconcordant. Below 48m: 1-3% calcite crystals on average. No weathered/ vuggy sections. ALTERATION: At 54.60, 55.0, small 1x 2-3cm patches of remobilized qtz-calcite Py with minor Galena. STRUCTURE: Foliation 70-75 to CA at 50.5m.	TO         LITHOLOGICAL DESCRIPTION         FROM           65 to CA.         100.45           .         101.70           39.05: 25cm wide subconcordant to crosscutting vein.         101.75           .         102.72           ALTERATION: 1% Py, tr. Cp Gn.         103.59           .         104.00           STRUCTURE: Top contact approx. 45 to CA.         105.77           .         106.67           42.5: Very vuggy, 5-7cm wide concordant qtz         107.35           calcite vein.         107.62           .         108.81           ALTERATION: 1% Py ? most on walls of vugs.         109.61           .         106.57           .         107.62           .         107.62           .         107.62           .         109.61           .         101.53           .         109.61           .         110.53           .         111.63           .         111.63           .         111.63           .         116.90           .         115.38           Below 48m: 1-3% calcite crystals on average.         115.38           .         116.90	TO         LITHOLOGICAL DESCRIPTION         FROM         TO           65 to CA.         100.45         101.70           .         101.70         101.70           .         101.70         101.70           .         102.72         103.59           .         102.72         103.59           .         102.72         103.59           .         102.72         103.59           .         102.72         103.59           .         102.72         103.59           .         102.72         103.59           .         104.00         105.14           .         105.77         106.67           .         105.77         106.67           .         105.77         106.67           .         107.35         107.62           .         108.81         109.61           .         108.81         109.61           .         105.57         107.62           .         108.81         109.61           .         105.51         111.63           .         105.51         110.53           .         108.81         109.61	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         WIDTH           65 to CA.         100.45         101.70         1.25           39.05: 25cm wide subconcordant to crosscutting vein.         101.70         101.95         0.25           39.05: 25cm wide subconcordant to crosscutting vein.         101.95         0.27         0.77           .         100.45         101.70         102.72         0.77           .         102.72         103.59         0.80         0.41           .         102.00         105.14         1.14           STRUCTURE: Top contact approx. 45 to CA.         105.17         106.67         0.70.35           .         106.67         107.35         0.68           42.5: Very vuggy, 5-7cm wide concordant qtz         107.35         0.68           .         106.67         107.35         0.68           42.5: Very vuggy, 5-7cm wide concordant qtz         107.62         108.81         1.19           .         108.61         101.53         0.92         .           .         108.61         110.53         1.10           .         108.61         110.53         0.92           .         106.51         111.65         1.10	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         WIDTH         Au ppb           65 to CA.         100.45         101.70         1.25         315.000           39.05: 25cm wide subconcordant to crosscutting vein.         101.95         102.72         0.77         580.000           .         102.72         103.59         0.87         575.000           ALTERATION: 1% Py, tr. Cp Gn.         102.59         104.00         0.64         590.000           .         105.59         104.00         0.54         1.14         75.000           .         105.59         104.00         105.14         1.14         75.000           .         104.00         105.14         1.14         75.000         0.0667         107.07         0.663         30.000           .         106.67         107.75         0.68         70.000         .         106.67         107.55         0.68         70.000           .         106.67         107.55         0.68         70.000         .         .         108.81         1.19         50.000           .         108.81         109.61         110.53         0.92         70.000         .         .         .         108.55	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         WIDTH         Au ppb         Cu ppm           65 to CA.         100.45         101.70         1.25         315.000         23.000           39.05: 25cm wide subconcordant to crosscutting vein.         101.70         101.95         0.25         3380.000         970.000           ALTERATION:         1X Py, tr. Cp Gn.         102.72         103.59         104.00         0.41         590.000         60.000           .         102.72         103.59         104.00         0.41         590.000         60.000           .         102.72         103.59         104.00         0.51.4         1.14         75.000         12.000           .         102.72         107.75         106.67         0.90         70.000         28.000           .         105.14         1.14         75.000         18.000         22.000         42.51         Very vuggy, 5-7cm wide concordant qtz         107.62         0.27         45.000         18.000         22.000         42.000         18.000         22.000         42.000         18.000         22.000         42.000         18.000         22.000         42.000         18.000         22.000         42.000         18.000	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         WIDTH         Au ppb         Cu ppm         Zn ppm           65 to CA.         100.45         101.70         1.25         315.000         23.000         70.000           39.05: 25cm wide subconcordant to crosscutting vein.         101.70         101.95         0.22         77.500         22.000         300.000           ALTERATION:         1% Py, tr. Cp Gn.         103.59         104.00         0.41         590.000         60.000         1800.000           .         105.77         106.67         0.90         70.000         22.000         30.000           .         102.72         105.59         0.87         575.000         10.000         60.000         1800.000           .         106.67         107.35         106.67         0.90         70.000         28.000         178.000           .         106.67         107.35         0.68         70.000         28.000         178.000           .         106.67         107.35         0.68         70.000         28.000         178.000           .         106.67         107.35         0.76.2         0.27         45.000         18.000         37.000         32.000	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         VIDTH         Au ppb         Cu ppm         Zn ppm         Ag ppm           65 to CA.         100.45         101.70         1.25         315.000         23.000         70.000         0.300           39.05: 25cm wide subconcordant to crosscutting vein.         101.70         101.75         0.27         0.77         500.00         26.000         500.000         60.000         50.000         60.000         50.000         60.000         50.000         60.000         1.200         60.000         1.200         60.000         1.200         60.000         50.000	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         VIDTH         Au ppb         Cu ppm         Zh ppm         Ag ppm         Pb ppm           65 to CA.         100.65         101.70         1.25         315.000         23.000         70.000         0.300         23.000         60.0000           39.05:         25cm wide subconcordant to crosscutting vein.         101.75         102.72         0.77         580.000         240.000         50.000         82.000         6.000         53.000           ALTERATION: 1X Py, tr. Cp Gn.         102.72         107.75         0.63         30.000         26.000         6.000         160.000         6.000         10.000         6.000         10.000         6.000         10.000         6.000         10.000         6.000         10.000<	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         VIDTH         Au ppb         Cu ppm         Zn ppm         Ag ppm         Pb ppm         Co ppm           65 to CA.         100.45         101.70         1.25         315.000         23.000         70.000         0.300         23.000         NIL           39.05: 25cm wide subconcordant to crosscutting vein.         101.70         101.95         0.27         580.000         970.000         500.000         6.000         82.000         NIL           ALTERATION: 1X Py, tr. Cp Gn.         102.72         107.75         0.06         6.000         100.000         6.000         100.000         8.000         NIL           Lower contact approx. 45 to CA.         105.74         1.14         75.000         22.000         165.000         1.000         8.000         NIL           Lower contact approx. 45 to CA.         105.77         106.67         107.35         0.68         70.000         32.000         12.000         18.00         8.000         NIL           42.5: Very vuggy, 5-7cm wide concordant qtz         107.35         0.68         70.000         32.000         23.000         23.000         12.000         10.000         NIL           4.5.45.10: Weakly-mod. bleached with <t< td=""><td>TO         LITHOLOGICAL DESCRIPTION         FROM         TO         WIDTH         Au ppb         Cu ppm         Zh ppm         Pb ppm         Co ppm         NI ppm           65 to CA.         100,45         101,70         1.25         315,000         23,000         70,000         530,000         NILL         NILL         NILL         NIL           39,05: 25cm wide subconcordant to crosscutting vein.         101,70         101,25         00,50         00,000         NILL         NILL         NILL           .         102,72         0.77         580,000         70,000         530,000         6,400         104,000         NILL         NILL           .         102,72         0.77         580,000         70,000         500,000         6,400         104,000         NILL         NILL           .         102,72         0.37         575,000         10,000         6,400         106,00         NILL         NILL           .         105,77         106,67         0.90         70,000         28,000         1,200         8,000         NILL         NILL           .         105,77         106,67         107,72         50,000         2,000         10,000         8,000         NILL         NILL&lt;</td><td>TO         LITHOLOGICAL DESCRIPTION         FROM         TO         VIDTH         Au ppb         Cu ppm         Zn ppm         Ag ppm         Pb ppm         Co ppm         Ni ppm         Pt ppb           65 to CA.         100.45         101.70         1.25         315.000         23.000         70.000         53.000         NIL         NIL         NIL         NIL           39.05:         25.cm wide subconcordant to crosscutting vein.         101.70         101.95         102.72         0.77         580.000         70.000         50.000         81.00         NIL         NIL         NIL           ALTERATION: 1X Py, tr. Cp Gn.         102.77         106.67         10.70         90.000         120.000         60.000         81.000         NIL         NIL         NIL           JUNCTURE: Top contact approx. 45 to CA.         105.77         106.67         0.90         70.000         28.000         178.000         81.000         NIL         NIL         NIL           Lower contact averages 20 to CA.         105.77         106.67         0.90         70.000         28.000         178.000         81.000         NIL         NIL         NIL           4.5: Very vuggy, 5-7cm wide concordant qtz         107.62         10.72         108.01</td><td>TO         LITHOLOGICAL DESCRIPTION         FROM         TO         VIDTH         Au ppb         Cu ppn         Zn ppn         Ag ppn         PS ppn         Ag ppn</td></t<>	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         WIDTH         Au ppb         Cu ppm         Zh ppm         Pb ppm         Co ppm         NI ppm           65 to CA.         100,45         101,70         1.25         315,000         23,000         70,000         530,000         NILL         NILL         NILL         NIL           39,05: 25cm wide subconcordant to crosscutting vein.         101,70         101,25         00,50         00,000         NILL         NILL         NILL           .         102,72         0.77         580,000         70,000         530,000         6,400         104,000         NILL         NILL           .         102,72         0.77         580,000         70,000         500,000         6,400         104,000         NILL         NILL           .         102,72         0.37         575,000         10,000         6,400         106,00         NILL         NILL           .         105,77         106,67         0.90         70,000         28,000         1,200         8,000         NILL         NILL           .         105,77         106,67         107,72         50,000         2,000         10,000         8,000         NILL         NILL<	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         VIDTH         Au ppb         Cu ppm         Zn ppm         Ag ppm         Pb ppm         Co ppm         Ni ppm         Pt ppb           65 to CA.         100.45         101.70         1.25         315.000         23.000         70.000         53.000         NIL         NIL         NIL         NIL           39.05:         25.cm wide subconcordant to crosscutting vein.         101.70         101.95         102.72         0.77         580.000         70.000         50.000         81.00         NIL         NIL         NIL           ALTERATION: 1X Py, tr. Cp Gn.         102.77         106.67         10.70         90.000         120.000         60.000         81.000         NIL         NIL         NIL           JUNCTURE: Top contact approx. 45 to CA.         105.77         106.67         0.90         70.000         28.000         178.000         81.000         NIL         NIL         NIL           Lower contact averages 20 to CA.         105.77         106.67         0.90         70.000         28.000         178.000         81.000         NIL         NIL         NIL           4.5: Very vuggy, 5-7cm wide concordant qtz         107.62         10.72         108.01	TO         LITHOLOGICAL DESCRIPTION         FROM         TO         VIDTH         Au ppb         Cu ppn         Zn ppn         Ag ppn         PS ppn         Ag ppn

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### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

									ASSAY	S				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
			120.03	120.53	0.50	180.000	46.000	305.000	0.500	20.000	NIL	NIL	NIL	NIL
		52.25: Two < 2cm wide subconcordant qtz	120.53	120.81	0.28	480.000	290.000	1400.000	11.600	36.000	NIL	NIL	NIL	NIL
		stringers with tr Py, < 1% black amph. +/- tourm.	120.81	121.11	0.30	215.000	210.000	1350.000	7.600	38.000	NIL	NIL	NIL	NIL
			121.11	121.88	0.77	30.000	34.000	305.000	1.000	62.000	NIL	NIL	NIL	NIL
		STRUCTURE: 65 to CA at 52-53m, 70 to CA	121.88	122.95	1.07	15.000	19.000	130.000	0.800	78.000	NIL	NIL	NIL	NIL
		at 57m.	122.95	124.05	1.10	25.000	26.000	208.000	1.400	110.000	NIL	NIL	NIL	NIL
		•	124.05	124.41	0.36	110.000	22.000	125.000	0.600	31.000	NIL	NIL	NIL	NIL
		Below 55.5m: Moderately banded due to weak	124.41	125.69	1.28	165.000	94.000	520.000	1.500	8.000	NIL	NEL	NIL	NIL
		bleaching and Chl-Ser. along foliation parallel	126.58	127.40	0.82	150.000	122.000	450.000	0.500	9.000	NIL	NIL	NIL	NIL
		slips.	129.91	130.37	0.46	200.000	39.000	142.000	0.500	10.000	NIL	NIL	NIL	NIL
		•	132.82	133.36	0.54	130.000	72.000	660.000	1.200	9.000	NIL	NIL	NIL	NIL
		ALTERATION: 2-3% fine disseminated Py.	133.36	134.09	0.73	220.000	84.000	1580.000	0.900	8.000	NIL	NIL	NIL	NIL
		•	137.00	137.75	0.75	890.000	54.000	435.000	0.800	7.000	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 70-80 to CA from	139.97	140.38	0.41	1680.000	58.000	1580.000	1.200	7.000	NIL	NIL	NIL	NIL
		60-63.5m.	140.38	140.99	0.61	130.000	58.000	430.000	0.300	7.000	NIL	NIL	NIL	NIL
			140.99	141.95	0.96	310.000	166.000	630.000	0.400	7.000	NIL	NIL	NIL	NIL
		63.0 to 65.0: Spotted with up to 20% <1-2mm	143.62	143.97	0.35	160.000	52.000	280.000	0.300	6.000	NIL	NIL	NIL	NIL
		calcite crystals disseminated throughout. Also over	143.97	144.34	0.37	2420.000	660.000	670.000	5.900	7.000	NIL	NIL	NIL	NIL
		10-15cm at 72.95, over 50cm at 74.0 and over	144.34	145.38	1.04	130.000	126.000	640.000	0.400	7.000	NIL	NIL	NIL	NIL
		50cm at 75.50.	146.31	146.97	0.66	85.000	88.000	860.000	0.700	12.000	NIL	NEL	NIL	NIL
		•	146.97	148.43	1.46	45.000	92.000	250.000	0.400	8.000	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 80 to CA at 65m,	148.43	149.75	1.32	30.000	64.000	180.000	0.400	6.000	NIL	NIL	NIL	NIL
		70-75 to CA at 74m, and 70 to CA at 80m.	149.75	150.85	1.10	30.000	84.000	230.000	1.300	8.000	NIL	NIL	NIL	NIL
			150.85	151.48	0.63	35,000	118.000	680.000	2.000	10.000	NIL	NIL	NIL	NIL
		67 to 75: 2-3% smmed. sized qtz eyes.	154.53	155.33	0.80	15.000	64.000	110.000	0.700	8.000	NIL	NIL	NIL	NIL
			155.33	156.05	0.72	15.000	44.000	100.000	0.600	8.000	NIL	NIL	NIL	NIL
		78.0 to 78.35: Crosscutting qtz vein with,	156.05	156.90	0.85	30.000	124.000	620.000	1.400	11.000	NIL	NIL	NIL	NIL
		1-3% Chl. Strongly sericitized wallrock	156.90	157.58	0.68	25.000	235.000	255.000	2.200	8.000	NIL	NIL	NIL	NIL

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### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

									ASSAYS	6				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nipprn	Pt ppb	Pd ppb
		with elevated Py for 10-15cm from both contacts.	157.58	157.75	0.17	55.000	220.000	830.000	2.900	19.000	NIL	NIL	NIL	NIL
			157.75	158.67	0.92	50.000	122.000	325.000	2.200	21.000	NIL	NIL	NIL	NIL
		ALTERATION: Vein 1-2% fine-med. Py, 1-2%	166.50	166.79	0.29	30.000	52.000	540.000	0.500	11.000	NIL	NIL	NIL	NIL
		Asp, < 1% Cp, mostly associated	167.24	167.59	0.35	20.000	100.000	418.000	0.400	12.000	NIL	NIL	NIL	NIL
		with late fractures.	169.08	170.50	1.42	10.000	54.000	46.000	NIL	8.000	NIL	NIL	NIL	NIL
			170.50	172.02	1.52	25.000	26.000	136.000	0.300	5.000	NIL	NIL	NIL	NIL
		STRUCTURE: Contacts near perpendicular to	172.02	172.95	0.93	20.000	19.000	650.000	NIL	6.000	NIL	NIL	NIL	NIL
		foliation, averaging 30 to CA. Foliation 75 to CA,	172.95	173.29	0.34	20,000	30.000	435.000	0.300	9.000	NIL	NIL	NIL	NIL
			173.29	174.35	1.06	30.000	38.000	210.000	0.300	8.000	NIL	NIL	NIL	NIL
		COMMENTS: Sulphides intergrown, Asp enveloping	175.38	176.39	1.01	15.000	32.000	100.000	NIL	5.000	NIL	NIL	NIL	NIL
		Py, Cp in places. Possibly 1 sulphide replacing another.	176.39	177.91	1.52	20.000	44.000	170.000	0.200	5.000	NIL	NIL	NIL	NIL
			177.91	179.22	1.31	20.000	46.000	508.000	0.200	4.000	NIL	NIL	NIL	NIL
		79.35: Crosscutting to subconcordant, qtz stringer <1cm wide.	179.22	180.78	1.56	75.000	18.000	272.000	NIL	4.000	NIL	NIL	NIL	NIL
			180.78	182.15	1.37	15.000	6.000	285.000	NIL	1.000	NIL	NIL	NIL	NIL
		ALTERATION: Minor Py.	182.15	183.40	1.25	30.000	20.000	285.000	0.300	4.000	NIL	NIL	NIL	NIL
			183.40	184.85	1.45	20.000	31.000	245.000	0.500	2.000	NIL	NIL	NIL	NIL
		80.2 to 81.35: Qtz eyes rare. 3-5% smmed. size fsp.	184.85	186.28	1.43	25.000	13.000	96.000	0.200	2.000	NIL	NIL	NIL	NIL
		phenocrysts. Pretetonic dyke or possibly a flow.	186.28	187.80	1.52	40.000	69.000	300.000	0.600	4.000	NIL	NIL	NIL	NIL
		•	187.80	188.85	1.05	130.000	94.000	410.000	1.500	4.000	NIL	NIL	NIL	NIL
•		ALTERATION: 2-3% fine disseminated Py.	188.85	189.30	0.45	310.000	170.000	310.000	3.700	5.000	NIL	NIL	NIL	NIL
			189.30	190.70	1.40	200.000	168.000	480.000	2.800	7.000	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 70 to CA.	190.70	192.10	1.40	90.000	138.000	345.000	2.100	4.000	NIL	NIL	NIL	NIL
			192.10	193.50	1.40	55.000	57.000	238.000	0.500	2.000	NIL	NIL	NIL	NIL
		COMMENTS: Slip/individual shear planes defined	198.08	198.85	0.77	85.000	48.000	890.000	0.700	9.000	NIL	NIL	NIL	NIL
		by micaceous laminae.	198.85	200.25	1.40	70.000	85.000	3400.000	0.800	4.000	NIL	NIL	NIL	NIL
			200.25	201.30	1.05	140.000	73.000	2850.000	0.700	6.000	NIL	NIL	NIL	NIL
		88.4 to 92.85: Small qtz eyes 1-2%, small fsp. grains	203.14	204.19	1.05	140.000	67.000	1960.000	0.500	5.000	NIL	NIL	NIL	NIL
		10-15% weakly banded mod. foliated. Bleached/	205.29	205.85	0.56	40.000	80.000	2800.000	0.500	1.000	NIL	NIL	NIL	NIL

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

ASSAYS FROM τn LITHOLOGICAL DESCRIPTION FROM то WIDTH Auppob Cuppon Znppon Ag ppm Pb ppm Co ppm Ni ppm Pt ppb Pd ppb altered to same degree as surrounding rock. 205.85 206.34 0.49 425.000 293.00010000.000 3,900 3.000 NIL NIL NIL NIL 206.34 206.74 0.40 80.000 73.000 2400.000 0.900 3.000 NIL NIL NIL NIL ALTERATION: 1-2% fine disseminated Py. 206.74 207.55 0.81 305.000 62.000 1350.000 0.800 1.000 NIL NIL NIL NIL 207.55 208.23 0.68 585.000 31.000 240.000 0.700 1.000 NIL NIL NIL NIL STRUCTURE: Foliation 70-75 to CA. 208.23 208.93 0.70 360.000 71.000 1200.000 1.100 1.000 NIL NIL NIL NIL 208.93 209.67 0.74 160.000 41.000 1650.000 0.900 1.000 NIL NIL NIL NIL COMMENTS: Probably a syn-to late tectonic 209.67 210.37 0.70 225.000 42.000 1950,000 0.700 NIL NIL NIL NIL NIL dyke, or a competent X-tal tuff which resisted 210.37 211.18 0.81 300.000 67.000 2730.000 0.800 NIL NIL NIL NIL NIL differential shearing. Unbanded. 212.66 214.06 1.40 1630.000 81.000 1530.000 0.900 NIL NIL NIL NIL NIL 214.06 214.40 0.34 350.000 43.000 185.000 0.600 3.000 NIL NIL NIL NIL 92.9: Crosscutting qtz veinlet. 214.40 214.95 0.55 465.000 8.000 93.000 0.500 NIL NIL NIL NIL NIL 215.66 214.95 0.71 195.000 30.000 89.000 0.700 NIL NIL NIL NIL NIL ALTERATION: Minor Py tr. Cp. 215.66 216.57 0.91 240.000 50,000 560.000 0.600 NIL NIL NIL NIL NIL 216.57 217.45 0.88 200.000 100.000 363.000 0.200 NIL NIL NIL NIL NIL STRUCTURE: Foliation 78 to CA at 92. 217.45 218.00 0.55 190.000 55.000 580.000 NIL NIL NIL NIL NIL 0.200 218.00 218.44 0.44 235.000 27.000 103.000 1.000 NIL NIL NIL NIL NIL 93.4 to 101.75: Medium grained, strongly banded 220.69 221.01 0.32 185.000 85.000 239.000 2.600 2.000 NIL NIL NIL NIL below 98m. Foliation weakly kinked in places. 221.01 221.65 0.64 75.000 36,000 93,000 0.400 NIL NIL NIL NIL NIL 221.65 222.62 0.97 160.000 153.000 810.000 0.900 NIL NIL NIL NIL NIL 223.55 ALTERATION: 3-4% disseminated Py. Rare narrow, 222.62 0.93 45.000 35.000 65.000 0.300 NIL NIL NIL NIL MILL foliation parallel seams. 228.40 0.62 275.000 226.000 227.78 140.000 1.600 NIL NIL NIL NIL NIL 228.89 40.000 23.000 135.000 228.40 0.49 0.300 NIL NIL NIL NIL NIL STRUCTURE: No distinct top contact. Lower contact, 228.89 230.28 1.39 25.000 33,000 258,000 NIL NIL NIL NIL NIL NIL coincident with 5cm gtz-calcite vein at 65-70 to CA. 230.28 230.60 0.32 345.000 312.000 114.000 0.200 NIL NIL NIL NIL NIL 230.60 231.78 NIL NIL NIL 1.18 40.000 112.000 800.000 0.400 NIL NIL 101.80 to 102.45: Reasonably fine grained, unbanded. 231.78 232.26 0.48 85.000 48.000 800,000 0.300 1.000 NIL NIL NIL NIL Moderately well lineated raking 80-90 to CA in foliation 232.26 232.75 0.49 90.000 115.000 760.000 0.900 1.000 NIL NIL NIL NIL plane. 232.75 234.10 1.35 60.000 18.000 258.000 NIL NIL NIL NIL NIL NIL

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#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9612

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									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pio ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
			234.10	235.58	1.48	30.000	20.000	78.000	NIL	NIL	NIL	NIL	NIL	NIL
		ALTERATION: 3-4% Py disseminated to banded. Weakly	235.58	236.62	1.04	20.000	63.000	50.000	NIL	NIL	NIL	NIL	NIL	NIL
		sericitized.	236.62	237.38	0.76	60.000	127.000	245.000	0.500	NIL	NIL	NIL	NIL	NIL
			237.38	237.75	0.37	50.000	320.000	53.000	NIL	NIL	NIL	NIL	NIL	NIL
		103.8: Subconcordant qtz-calcite veining over 20-25cm.	237.75	238.03	0.28	15.000	41.000	89.000	NIL	NIL	NIL	NIL	NIL	NIL
			238.03	238.43	0.40	65.000	96.000	422.000	0.300	NIL	NIL	NIL	NIL	NIL
		ALTERATION: 1-2% Py, tr. galena.	239.55	239.98	0.43	25.000	24.000	165.000	NIL	NIL	NIL	NIL	NIL	NIL
			241.00	242.46	1.46	20.000	75.000	48.000	NIL	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 70 to CA, at 102.75.	242.46	243.48	1.02	20.000	66.000	39.000	NIL	NIL	NIL	NIL	NIL	NIL
			243.48	244.13	0.65	20.000	43.000	33.000	NIL	NIL	NIL	NIL	NIL	NIL
		102.45 to 107.4: Medium to coarse grained, strongly banded,	244.13	245.52	1.39	15.000	81.000	52.000	NIL	NIL	NIL	NIL	NIL	NIL
		moderately bleached with tr1%, small qtz eyes	245.52	245.97	0.45	20.000	52.000	52.000	NIL	NIL	NIL	NIL	NIL	NIL
		coarse crystal tuff.	245.97	247.30	1.33	25.000	59.000	49.000	NIL	NIL	NIL	NIL	NIL	NIL
			247.30	248.86	1.56	20.000	100.000	46.000	0.300	NIL	NIL	NIL	NIL	NIL
		ALTERATION: 3-5% fine-med. grained disseminated Py.	248.86	250.46	1.60	30.000	133.000	52.000	0.400	NIL	NIL	NIL	NIL	NIL
			252.97	253.89	0.92	15.000	20.000	60.000	NIL	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: 75 to CA at 106m, 65 to 70 to CA	253.89	255.21	1.32	15.000	19.000	59.000	NIL	NIL	NIL	NIL	NIL	NIL
		at 107.3m.	260.74	261.57	0.83	35.000	28.000	74.000	0.200	NIL	NIL	NIL	NIL	NIL
			261.57	261.98	0.41	50.000	18.000	92.000	0.200	1.000	NIL	NIL	NIL	NIL
		COMMENTS: Lineation 40-50 degree rake in plane	261.98	262.49	0.51	30.000	17.000	68.000	NIL	1.000	NIL	NIL	NIL	NIL
		of foliation.	262.49	263.49	1.00	30.000	13.000	69.000	NIL	NIL	NIL	NIL	NIL	NIL
			263.49	264.26	0.77	45.000	14,000	246,000	NIL	NIL	NIL	NIL	NIL	NIL

107.5+: 12-15cm wide subconcordant qtz vein with coarse calcite veins at 109.2-2cm wide, 110.45, 111.80-2-3cm wide. 115.1-tr-1% albite?, tr. garnet in minute tension gashes over 10cm, with tr Py, Gnt.

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ALTERATION: 4-5% fine disseminated Py, some

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#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

FROM       TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppm       Pb ppm       Co ppm       Ni ppm       Pt ppb       Pd ppb         banded, on average.       Up to 5-7% over 3-5m.       Trace garnet.         Minor Py, < 1% galena in veins       at 109.2, and 110.45.       .         at 109.2, and 110.45.       .         STRUCTURE:       Contacts broken, appear sub parallel       .         to CA.       Foliation 75 to CA at 110.5, weakly kinked.       .         65-80 to CA at 115 and 75-80 to CA at 115.5.       .         . <t< th=""><th>FROM       TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppm       Pb ppm       Co ppm       Ni ppm       Pt ppb       Pd ppb         banded, on average.       Up to 5-7% over 3-5m. Trace garnet.       Minor Py, &lt; 1% galena in veins       at 109.2, and 110.45.       .</th><th>FROM       TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Auppob       Cuppon       Zn ppon       Ag ppon       Pb ppon       Coppon       Nip ppn       Nip ppn       Nip ppn       Nip ppn<!--</th--><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>ASSAY</th><th>s</th><th></th><th></th><th></th><th></th></th></t<>	FROM       TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppm       Pb ppm       Co ppm       Ni ppm       Pt ppb       Pd ppb         banded, on average.       Up to 5-7% over 3-5m. Trace garnet.       Minor Py, < 1% galena in veins       at 109.2, and 110.45.       .	FROM       TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Auppob       Cuppon       Zn ppon       Ag ppon       Pb ppon       Coppon       Nip ppn       Nip ppn       Nip ppn       Nip ppn </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>ASSAY</th> <th>s</th> <th></th> <th></th> <th></th> <th></th>									ASSAY	s				
STRUCTURE: Contacts broken, appear sub parallel to CA. Foliation 75 to CA at 110.5, weakly kinked. 65-80 to CA at 115 and 75-80 to CA at 115.5. 115.4 to 116.5: tr1% orange garnet present, mod- strongly sericitized, strongly lineated at 70-75%	STRUCTURE: Contacts broken, appear sub parallel to CA. Foliation 75 to CA at 110.5, weakly kinked. 65-80 to CA at 115 and 75-80 to CA at 115.5. 115.4 to 116.5: tr1% orange garnet present, mod- strongly sericitized, strongly lineated at 70-75% rake in plane of foliation. ALTERATION: 3-4% disseminated to banded Py, tr. galena in crosscutting. 2-5mm of qtz stringers, 30 to CA. 1-2% specular hematite? in bands with Py, fine chlorite. Trace fine garnet present above abut 118m.	STRUCTURE: Contacts broken, appear sub parallel to CA. Foliation 75 to CA at 110.5, weakly kinked. 65-80 to CA at 115 and 75-80 to CA at 115.5. 115.4 to 116.5: tr1% orange garnet present, mod- strongly sericitized, strongly lineated at 70-75% rake in plane of foliation. ALTERATION: 3-4% disseminated to banded Py, tr. galena in crosscutting. 2-5mm of qtz stringers, 30 to CA. 1-2% specular hematic? in bands with Py, fine chlorite. Trace fine garnet present above abut 118m. STRUCTURE: Foliation 65 to CA at 116. Foliation 85 to CA at 121.25, 70 to CA at 121.6, 80 to CA at 130.75. COMMENTS: Most garnet pale pink. Mod-strongly banded blanched caricitized blanched parabet 100m	FROM TO	LITHOLOGICAL DESCRIPTION banded, on average. Up to 5-7% over 3-5m. Trace garnet. Minor Py, < 1% galena in veins at 109.2, and 110.45.	FROM	то	WIDTH	Au ppb	Cuppm	Zn ppm	Ag ppm	Pb ppm	Со ррт	Ni ppm	Pt ppb	Pd ppb
	rake in plane of foliation, - ALTERATION: 3-4% disseminated to banded Py, tr. galena in crosscutting. 2-5mm of qtz stringers, 30 to CA. 1-2% specular hematite? in bands with Py, fine chlorite. Trace fine garnet present above abut 118m.	rake in plane of foliation. - ALTERATION: 3-4% disseminated to banded Py, tr. galena in crosscutting. 2-5mm of qtz stringers, 30 to CA. 1-2% specular hematite? in bands with Py, fine chlorite. Trace fine garnet present above abut 118m. - STRUCTURE: Foliation 65 to CA at 116. Foliation 85 to CA at 121.25, 70 to CA at 121.6, 80 to CA at 130.75. - COMMENTS: Most garnet pale pink. Mod-strongly banded blaeched sericitized balow about 100m		STRUCTURE: Contacts broken, appear sub parallel to CA. Foliation 75 to CA at 110.5, weakly kinked. 65-80 to CA at 115 and 75-80 to CA at 115.5. 115.4 to 116.5: tr1% orange garnet present, mod- strongly sericitized, strongly lineated at 70-75%												
STRUCTURE: Foliation 65 to CA at 116. Foliation 85 to CA at 121.25, 70 to CA at 121.6, 80 to CA at 130.75. COMMENTS: Most garnet pale pink. Mod-strongly banded, bleached sericitized below about 100m. 117.45 to 118.25: 4cm wide concordant blue grey qtz stringers. STRUCTURE: Strongly kinked in places between 116-128m.	- 117.45 to 118.25: 4cm wide concordant blue grey qtz stringers. - STRUCTURE: Strongly kinked in places between 116-128m.			120.6 to 121.15: Intensely kinked with a few <5mm Py seams												

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### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION and several, cm wide, subconcordant clay mineral zones, apparently indicating minor faults.	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Coppm	Nî ppm	Pt ppb	Pd ppb
		ALTERATION: Minor Py, Cp, tr Gn. Garnets present over 5-10cm in wallrock. COMMENTS: 1-2% fine gtz-eves. 3-5% fine-med.												
		grained Py throughout 100-136. No significant calcite alteration												
		136 to 160: Similar to uphole dacites in everything but qtz-eye abundance. 2-3% smmed. size qtz eyes.												
		ALTERATION: 3-5% fine-med. grained Py disseminated to weakly banded, locally to 5-7% over 20-50cm.												
		STRUCTURE: Foliation 70 to CA at 143, 75 to CA at 147. Averages 70 to CA from 148-157.												
		160 to 171: Relatively fine grained, weakly banded. Moderately-strongly sericitized, bleached. 1-2% generally small qtz eyes. Little if any kinking of foliation.												
		ALTERATION: 3-4% fine-med. Py, banding rare.												
		STRUCTURE: Foliation 85 to CA at 157.5, 70 to CA at 159.75. Averages 70-75 to CA from 160-169m.												
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#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION COMMENTS: Rare streaks of lime to bright "fucshite" green over 2m at 155, likely lithic fragments.	FROM	10	WIDTH	Au ppb	Cu ppm	2n ppm	Ag ppm	Pb ppm	Co ppm	Nî ppm	Pt ppb	Pd ppb
		Lineation raking 45-50 degrees in foliation plane. - 171 to 187.75: Strongly banded due to spaced sericite rich shear planes, parallel to foliation. Strongly fractured parallel to foliation-from 176.25-186. 172.95-173.3 at least, 75-80% qtz-calcite veins. Three narrow zones of fault gorge between 182 and 185m, 2-15cm wide.												
		ALTERATION: 3-5% fine disseminated Py. 1% Py tr Gn from 172.95-173.3.												
		STRUCTURE: Foliation 70-75 to CA from 170-175m. Foliation 80 to CA from 180-194m.												
		187.75 to 197.35: Medium grained, weakly banded. 3-5% smmed. size qtz-eyes. Subconcordant 2-5cm wide qtz veinlets with weakly bleached wallrock contacts at 198.15, 198.70.												
		ALTERATION: 3-5% fine-med. grained disseminated Py. tr Sp at 128.25. Minor pink calcite at 128.75.												
		STRUCTURE: Contact sheared at 30 to CA with Chl-calcite over 3-5cm. Foliation 70 to CA at 194.5.												
		128.35 to 228.5: Pale grey, unbanded qtz-eye dacite tuff 3-5% smmed. size qtz-eyes, 7-8% locally to												

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

									ASSAY	s				
FROM	τn		FROM	το	WIDTH	Au pob	Cuppm	Zn oom	Ag pom	Pb ppm	Co pom	Nippm	Pt ppb	Pdippb
11001		10% over 1/2m below 208 5 Frequently weekly bleached					FF						••	
		over (1 to Sem some parallel to folistion Subconcerdant												
		the selected units and the units of 207 0, 204 7, 204 55												
		dtz-calcite ventets 1-3cm wide at 203.9, 200.3, 200.33.												
		•												
		ALTERATION: 3-4% fine-med. grained disseminated Py. Below												
		about 209m-tr Cp Sp Gn?, with narrow Py seams at												
		209m. 5-7% Py present, some as large aggregates												
		occurring with dark grey wisps of remobilized qtz, and in												
		pressure shadows of lg. qtz- eyes.												
		214.2: 2-3cm wide qtz vein, nearly perpendicular to												
		foliation. Subconcordant-concordant qtz-calcite												
		veinlets at 226.2, 226.7, 227.75.												
		ALTERATION: Abundant fine tourmaline in gtz,												
		along both contacts, 1% Py, trace Cp.												
		•												
		STRUCTURE: Vein at 25-30 to CA. Foliation 60 to CA												
		at 213-213 5 80 to CA at 218												
		228 5 to 253 2: Abrunt transition to weakly-mod												
		borded attacks depite 3.5% attackes generally small												
		Danked qtz-eye dacite. 5-3% qtz-eyes generatty smatt.												
		ALTERATION, 7.5% fine discominated by												
		ALIERATION. J JA THE UISSEMMALE FY.												
		STRUCTURE: Enlightion 70-75 to CA from 220-2/0 5m												
		STRUCTURE, TOUTOLIUT /UT/J LU GA TI UN 2207247.JM.												
		TOLIBLION 03 LU LA BE 230-237.												
		•												

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### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9612

									ASSAY	S					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nippon	Ptppb	Pd ppb	
		Below 238.20: Strongly banded.													
		ALTERATION: 4-5% fine Py disseminated to banded,													
		< 1mm wide.													
		•													
		STRUCTURE: Foliation 70-75 to CA above 261m.													
		Foliation 80-85 to CA from 261.25-262. 263-265m													
		foliation variable 60-80 to CA.													
		-													
		Z-97 med - to size attraves (orselv to 10% over 5m													
		Including 261-261 5 fine argined 2-32 sm atz eves													
		-													
		261.8 to 264.3: similar to 261-261.5.													
264.96	267.45	FELSIC INTRUSIVE DYKE (Felsic Intrus. Dyke) - Fine-	264.26	265.13	0.87	30.000	10.000	100.000	NIL	1.000	NIL	NIL	NIL	NIL	
		med. grained, med. red brown, tan at contacts.													
		Consists 80-85% potassic feldspar. 5% fine mafic silicates													
		Hb+/-Chl. 10-15% grey-white-sodic?-fsp phenocrysts,													
		most, < 1mm.													
		•													
		ALTERATION: tr-1% Py concentrated within bleached													
		zones at contacts.													
		• STRUCTURE: Top contract 45 to CA Very weekly foliated													
		concordent with denites Lower contect 80 to CA													
		CONFORMER WITH MACILES. LOWER CONTACT OF LO GA.													

### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9612

											ASSAY	s				
FROM	TO	LITH	OLOGICAL DESCRIP	TION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Plo ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
267.45	276 45	FINE-MED. GRAIN	FD QID (QID, fa-	ma) - Similar	267.31	268.12	0.81	35.000	8,000	110,000	0.300	1.000	NIL	NIL	·NTL	NTI.
201145		to interval fro	m 228.5-253.2.	Weakly-mod, banded 1-3%	268.12	269.18	1.06	50,000	8,000	130.000	0.300	1.000	NIL	NIL	NIL	NTL
		sm. to rare lq.	atz. eves. Mod	lerately sericitized less than or	271.17	272.13	0.96	35.000	9,000	114_000	NTI	3.000	NIL	NIL	NTL	NTL
		equal to 1% ge	necaliv concorda	nt atz-calcite +/- Ry tr in veins	274.03	274 85	0.82	115.000	29.000	125.000	0.700	2.000	NTI	NTI	NTI	NTI
		1-3cm wide. 27	5 30-276 45 tra	insition to decite	214105	2/4.05	0.02	1151000	271000	1221000	01100	2.000				
		with 8-10% sm	la atz-eves													
			· g. q													
		ALTERATION: 3-5	% disseminated t	o occasionally banded Py bands												
		1-5mm wide. Tr	ace tourmaline i	n gtz-calcite veinlet at 268. tr Pv.												
		STRUCTURE: Foli	ation generally	75-85 to CA, occasionally												
		to 65 or 90 to	CA. Foliation a	t end of hole 80 to CA.												
		DO	WN-HOLE SURVEY D	ATA												
		DEPTH	INCLINATION	BEARING												
		39.63	-50.00													
		154.57	-52.00													
		214.07	-46.00	9.00												
		274.39	-45.50	12.00												
		276.45	-45.50													

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9613 Collar Eastings: -600.00 Collar Northings: -775.00 Collar Elevation: 5.00 Grid: Rich

Collar Inclination: -75.00 Grid Bearing: 360.00 Final Depth: 474.20 metres DDH drilled on claim Lot5,ConI, Richardson Twp.Drill contractor, Bradley Bros. Di

WIDTH Auppob Cuppin Znippin Agippin Polippin Coppin

0.300

NIL

3.000

2.000

NIL

NIL

0.54 130.000 54.000 92.000

NIL 31.000 27.000

ASSAYS

24.92 0.38

26 56

τo

15.64

 FROM
 TO
 LITHOLOGICAL DESCRIPTION
 FROM

 0
 18.85
 OVERBURDEN (OB) ~Casing, Lowermost .75-.9m
 15.10

 banded dacite bedrock.
 Acid test at 18.9m-75 degrees.
 15.10

ALTERATION: 5-7% disseminated Py.

STRUCTURE: Foliation 50 to CA.

COMMENTS: H diameter core.

18.85 44.8 FINE-MED. GRAINED QID (QID, fg-mg) pale green to grey green, well foliated with 2-3% sm.-med. size 1-4mm qtz eyes. Weakly-mod. banded due to calcite and k-spar alt along foliation parallel slips/fractures. 24.6, strong pervasive k-spar alt over 25-30cm with fracture filling qtz-calcite-Chl. 26.6-28.0, med. grained unbanded interval with, less than or equal to, 1% small qtz eyes-gradational contacts. 30.0-38m, well banded due to, less than or equal to, 1mm wide, closely spaced fractures with calcite, k-spar alteration

> ALTERATION: 1-2% fine disseminated Py. Weak-mod. k-spar alt along foliation parallel fractures above

> > HOLE No: NR9613

Níppm Ptppb Pdppb

NIL

NIL

NIL

NIL

1

MTE

NIL

#### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAV	\$					
FROM	то	LITHOLOGICAL DESCRIPTION 22.5m and below 23m. 2-3% fine-coarse disseminated Py. k-spar alt along fractures cases at 26.6m. Weak bleaching and weak pervasive k-spar alteration from 29.0- 29.7	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	s Pbppm	Соррт	Ni ppm.	Pt ppb	Pd ppb	
		STRUCTURE: Foliation variable from 50-60 to CA, averaging 55 degrees above 22m. Foliation 45 to CA at 22.75m. Foliation 45-50 to CA at 26m. 50 to CA at 30m, 45 to CA at 32m, 45 to CA at 37m, 45-50 above 42m, and foliation 50-55 from 42-22m.													
<b>44.8</b>	47.35	INTERMEDIATE QID (QID, Int.) - contaminated. Fine-med. grained, dark grey streaked and with 5-10cm long bleached zones, occasional qtz-calcite stringers parallel to foliation. 10-20%? fine mafic silicates. ALTERATION: 5-7% fine-med. grained disseminated Py. STRUCTURE: Top contact concordant, fairly sharp. Lower contact weakly sheared, bleached, coincident with foliation parallel qtz stringers over 10cm.	44.80 46.22	46.22 46.90	1.42 0.68	20.000 95.000	134.000 91.000	148.000 103.000	NIL NIL	2.000	NIL	NIL	NIL NIL	NIL NIL	
47.35	52.15	MEDCOARSE QID (QID mg-cg) - pale-	46.90	47.45	0.55	40.000	70.000	149.000	NTL	3.000	NIL	NIL	NIL	NIL	

.

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

								ASSAY	5					
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	to	WIDTH	Au ppb	Cuppin Znippin	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
		med. grey, well foliated with 3-5% smlg. qtz eyes.	47.45	48.02	0.57	20.000	44.000 1160,000	NIL	2.000	NIL	NIL	NIL	NIL	
		Weakly bleached and banded due to barren-late?-	51.33	51.70	0.37	30.000	97.000 3400,000	NIL	NIL	NIL	NIL	NIL	NIL	
		Crosscutting 1cm wide qtz stringers at 48.1 and 52.48m	51.70	52.10	0.40	20.000	48.000 615.000	0.300	2.000	NIL	42.000	NIL	NIL	
		both at about 30 to CA.												
		- ALTERATION: 1-3% fine disseminated Py. 52.30-52.7, tr-												
		1% Sph as streaks along foliation planes and in concordant												
		<1cm wide qtz-calcite-chlorite stringers.												
		- STRUCTURE: Lower contact coincident with 3-4cm												
		wide subconcordant qtz-całcite vein at 65 to CA.												
52.15	59.3	QTZ-FSP PORPHYRY (QTZ-Fsp Porph.) - intrusive?	52,10	52.39	0.29	25,000	61.000 3180.000	NIL	NIL	NIL	NIL	NTL	NIL	
		Coarse grained. Dark grev-black spotted with 3-5% gtz	55.38	55.72	0.34	30,000	56.000 2650.000	0.400	3.000	NIL	NIL	NIL	NIL	
		eves and 1-5% grev-white fsp phenocrysts-to 10%												
		locally-Probably intrusive. 52.55-53.6. modstrongly												
		bleached as is 20cm at 57.9-inclusion?												
		ALTERATION: 3-4% fine-med. disseminated Py, often												
		euhedral. Minor Sp along foliation parallel fracture												
		at 52.2 and 2-3% over 10cm at 55.6 and one fracture												
		at 59.85.												
50.3	62 0	WED -CRS OID (OID moreco) - similar to interval	59.32	59.63	0.31	20.000	11.000 164.000	NTI	1.000	NT)	NTI	NI	NTL	
	52.0	from 47 35-52 15 Strongly bleached from 57 95-58 95	59.63	59.90	0.36	15.000	30.000 3000 000	NTI	1.000	NTI	NTI	NTI	NTL	
		· · ·	.03	27.77	0.30	131000	30.000 3000,000		1.000		WIL.		N16	

.

### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	 S					
FROM	to	LITHOLOGICAL DESCRIPTION ALTERATION: 1-2% Py, minor Sph along qtz calcite stringer. Foliation parallel at 59.85.	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
62.0	77.4	QTZ-FSP PORPHYRY INTRUSIVE (QTZ-Fsp Porph. Intrus.) - similar to interval from 52.15-59.3. 2-3% smlg. qtz eyes. 1-3% sm. fsp phenocrysts, locally to 5-7% over 30-50cm. 72.30-73.30, weakly bleached/banded parallel to foliation, 2-3% Crosscutting qtz stringers plus concordant calcite-qtz stringers. 72.25-72.65, 5% calcite+/- qtz-Chl-Py stringers, concordant. 76.75- 78.25, 15% calcite-qtz Chl-Py subconcordant to Crosscutting stringers.	66.94	61.79 68.14	62.26 1.20	0.47 10.000	25.000 30.000	30.000 126.000	108.000 NIL	NIL 2.000	1.000 NIL	NIL NIL	NIL NIL	NIL NIL	NIL
		ALTERATION: 3-5% fine disseminated Py. - STRUCTURE: Top contact foliation parallel coincident with qtz-calcite-Chl stringers at approx. 40 degrees. Foliation 50 to CA at 69.5m, 40-45 to CA at 72.5m, 50-55 to CA above 75m.													
77.4	83.3	MEDCRS. QID (QID mg-cg) - similar to interval from 59.3-62.0m. Moderately bleached/ banded. 2-3% qtz eyes, locally to 7-10% over 15-20cm. ALTERATION: 1-3% fine disseminated Py, 3-4% over lowermost 1-1.5m. Frequent narrow calcite	78.60 79.45 79.87 80.09 80.95 81.35	79.45 79.87 80.09 80.95 81.25 82.35	0.85 0.42 0.22 0.86 0.30 1.00	55.000 75.000 35.000 30.000 30.000 30.000	16.000 7.000 18.000 11.000 14.000 6.000	110.000 445.000 0.015 205.000 1280.000 136.000	NIL NIL 0.300 NIL NIL NIL	2.000 1.000 1.000 3.000 2.000	NIL NIL NIL NIL NIL	NIL NIL NIL NIL 210.000	NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL	

.

### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		filled fractures, with chloritization over a few	82.35	83.10	0.75	45.000	18.000	202,000	NIL	3.000	NIL	100.000	NIL	NIL
		mm into wallrock, tr Sph at 79.6. 2-3mm wide											•	
		Sph seam along concordant calcite-Chl veinlet												
		at 80m with, tr disseminated over 5cm in wallrock.												
		1% disseminated Sph over 10cm at 81.1.												
		STRUCTURE: Lower contact chilled, weakly												
		sheared, gradational over 10-15cm. Foliation												
		60 to CA just below contact, variable from 45-60												
		to LA. Follation 45-50 to LA at lower contact.												
83.3	88.67	QTZ-FSP PORPHYRY INTRUSION (QTZ-Fsp Porph. Intrus.) -												
		similar to interval from 62.0-77.4 but												
		with less Py, more fsp-up to 5-10% over 30-50cm-												
		and with 3-5% fine biotite present over 20-50cm at 85.7												
		and 87.0m.												
		ALTERATION: 2-3% fine-med. grained disseminated Py.												
		STRUCTURE: Foliation 45-55 to CA. Lower contact												
		abrupt but unremarkable.												
		COMMENTS: Py, fsp decrease markedly, banded to												
		pervasive bleaching appears.												
88 67	00.8	MED -CRS OID (OID march) - similar to interval	80 73	90.20	0.47	15 000	41 000	85 000		5 000		280 000	NTI	

.

### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pib ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		from 77.4-83.3. 88.67-89.20, weak-mod. pervasive	90.20	90.80	0.60	25.000	13.000	440.000	NIL	3.000	NIL	310.000	NIL	NIL
		bleaching. 89.20-90.8, banded, local bleaching adjacent												
		to foliation parallel slips/shears and subconcordant												
		fractures. 90.3, two subconcordant qtz-stringers with												
		MINOF PY.												
		ALTERATION: 1-3% fine disseminated Py.												
		STRUCTURE: Foliotion 40 to CA at 00m - 50.55 to												
		CA at lower contact												
		COMMENTS: Py, fsp decrease markedly, banded due												
		to pervasive bleaching appears.												
00 B	00.08													
90.0	99.00	ulz-rsp Pokphiki (ulz-rsp Porph.) - possibly												
		$\frac{1}{100} = \frac{1}{100} = \frac{1}$												
		stringers at 01 60 01 75 04 8 04 0 06 3 Subconcor-												
		dent to Crosscutting generally with minor Py Chi												
		tr tourmaline.												
		ALTERATION: 3-5% fine-evenly disseminated Py.												
		•												
		STRUCTURE: Foliation 50-55 to CA throughout												
		interval, 55-60 at lower contact.												

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#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

								ASSAY	s				
FROM T	TO LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Со ррт	Ni ppm	Pt ppb	Pd ppb
99.08 105	5.15 MEDCRS. QID (QID, mg-cg) - similar to	99.10	99.81	0.71	5.000	8.000	97.000	NIL	1.000	NIL	575.000	NIL	NIL
	previous intervals of this unit e.g. 88.67-90.8.	99.81	100.05	0.24	10.000	46.000	0.015	NIL	1.000	NIL	580.000	NIL	NIL
	Moderately well banded due to bleaching. 102.9,	100.05	100.68	0.63	20.000	15.000	125.000	NIL	4.000	NIL	400.000	NIL	NIL
	10-12cm wide qtz vein, concordant, with, tr Py and	102.82	103.00	0.18	5.000	5.000	120.000	NIL	2.000	NIL	540.000	NIL	NIL
	a few % tourmaline. 103.48-103.8, qtz vein with minor	103.00	103.50	0.50	10.000	8.000	150.000	NIL	2.000	NIL	138.000	NIL	NIL
	Chl-calcite altered inclusions, tr-1% Py and felted	103.50	103.92	0.42	5.000	5.000	93.000	NIL	2.000	NIL	144.000	NIL	NIL
	masses of fine tourmaline, filling an irregular												
	fracture just below to contact. 104.0-105.15,												
	weak pervasive bleaching.												
	ALTERATION: 2-3% fine disseminated Py, 3-10cm, wide												
	concordant seam of honey-brown Sph at 100.2.												
	•												
	STRUCTURE: Vein and foliation 50-55 to CA.												
	Top contact foliation parallel, lower contact sub-												
	concordant to Crosscutting, averages 20-30 to CA.												
105.15 149	9.9 QTZ-FSP PORPHYRY (QTZ-Fsp Porph.) -	112.50	113.30	0.80	315.000	30.000	855.000	1.400	1.000	NIL	42.000	NIL	NIL
	possibly intermixed with minor extrusive material.	113.30	113.95	0.65	450.000	34.000	1450.000	2.400	NIL	NIL	14.000	NIL	NIL
	Similar to interval from 90.8-99.08, but with more	142.70	143.32	0.62	25.000	23.000	108.000	NIL	NIL	NIL	220.000	NIL	NIL
	foliation parallel fracturing, bleaching, and banding	146.50	147.80	1.30	10.000	17.000	130.000	NIL	4.000	NIL	270.000	NIL	NIL
	than in uphole intervals. Subinterval contacts	147.80	148.57	0.77	15.000	21.000	185.000	NIL	35.000	NIL	166.000	NIL	NIL
	somewhat sheared, gradational, and difficult to pinpoint.	148.57	149.22	0.65	20.000	145.000	NIL	NIL	NIL	NIL	122.000	NIL	NIL
	ALTEDATION: 2-5% fine disceminated by locally to												
	5-7% over 20-30cm Relow about 144m												
	J'TH OVEL LU"JUCHI. DELUW ADULL IMMM												

### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

									ASSA	'S				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		5-7% disseminated Py up to 7-10% over 30-50cm weak.												
		STRUCTURE: Foliation 50-55 to CA from 104-114m.												
		Foliation 45 to CA at 115m, 55-60 at 118, 45 at												
		125, 50-60 to CA above 147, often weak. 45 to CA												
		at 148.75, weak, irregular and contorted below that.												
		106.62: 18cm wide, unbanded fine grain interval												
		without eyes/phenocrysts. Apparently a dacitic												
		inclusion.												
		109.5 to 111.7: 5-15% pale grey, fine fsp phenocrysts.												
		112.6 to 113.9: Banded with bleached foliation parallel												
		intervals to 3cm wide with tourm. filled Crosscutting fracture												
		at 45 to CA at 113.0.												
		•												
		ALTERATION: 4-5% fine-med. grained disseminated Py.												
		•												
		STRUCTURE: Foliation 50 to CA.												
		113.9 to 116.15: Fine-med. grained weakly banded												
		with, < 1mm wide bleached												
		fractures. 1-2% sm. qtz eyes-likely a crystal tuff.												
		116.15 to 117.2: fsp phenocrysts present at 4-5%,												
		qtz eyes rare or absent.												

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### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

														**
								_	ASSAY	s 	_		- · ·	
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Coppen	Ni ppm	Ptppb	Pd ppb
		STRUCTURE: Foliation 55-60 to CA.												
		•												
		117.2 to 127.25: Fine-med. grained qtz-fsp porphyry												
		1–3% smmed. size qtz eyes. 117.4, Crosscutting												
		calcite altered mafic dyke. Moderately sheared,												
		appears gabbroic.												
		•												
		ALTERATION: 2-5% fine-med. grained disseminated Py.												
		•												
		STRUCTURE: 117.4 dyke at 30 to CA.												
		•												
		127.25 to 129.9: Weak bleaching, weak-mod.												
		k-spar alteration immediately adjacent to fractures.												
		Colour change from dark grey above 127.25												
		to olive-grey below, due to weak pervasive												
		k-spar alteration +/- ep. sausserite.												
		•												
		ALTERATION: Weak bleaching, tr k-spar along												
		foliation parallel to Crosscutting fractures, with epidote,												
		and calcite common from 129.7-129.9.												
		STRUCTURE: Foliation 50-55 to CA. Poorly												
		developed foliation-overpointed?-offset along												
		numerous minor fractures. Veining fracture												
		controlled, 5-45 to CA.												
		•												
		COMMENTS: A few ladder-vein like fracture												
		fillings.												

### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

									ASSAYS					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Соррп	Ni ppm	Pt ppb	Pd ppb
		134.2: Narrow <2cm qtz-Chl vein with strong											•	
		local k-spar alteration of wallrock.												
		137.9 to 138.2: Three <1cm wide, vuggy qtz-calcite-												
		Chl-ep-Py stringers 35-65 to CA, fracture controlled.												
		ALTERATION: 3-5% fine Py over 35-45cm,												
		primarily from stringers.												
		•												
		STRUCTURE: Foliation weak 40-55 to CA.												
		•												
		134.95 to 149.9: Fine-med. grained qtz-fsp porphyry.												
		Weakly foliated, moderately fractured												
		•												
		ALTERATION: 3-5% fine disseminated Py increasing at												
		depth. Biotite and zones of pale grey fsp +/- qtz												
		rich remobilized/recrystallized material present												
		below 148.3. 148.5-149.9 5-7% disseminated Py. Up												
		to 7-10% over 30-50cm.												
		•												
		STRUCTURE: Well foliated below 146.6 at 50												
		to CA, below 146.8 foliation distorted to												
		overprinted.												
		COMMENTS, Apparently a bonder some of perticity												
		comments: Apparently a border zone of partially												
		assimilated dacite, adjacent to mon body.												

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9613

149.9 170.79 MUM INTRUSIVE (MUM Intrus.) - fine-

FROM

то

Page 11

						ASSAYS	6				
FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
149.22	149.94	0.72	20.000	197.000	NIL	0.200	NIL	NIL	42.000	NIL	NIL
149.94	150.89	0.95	68.000	500.000	77.000	1.000	NIL	34.000	70.000	NIL	8.000
150.89	151.64	0.75	5.000	122.000	NIL	0.300	NIL	NIL	350.000	NIL	NIL
167.23	167.96	0.73	NIL	41.000	NIL	NIL	NIL	NIL	300.000	NIL	NIL
167.96	168.60	0.64	NIL	44.000	NIL	NIL	NIL	NIL	340.000	NIL	NIL
168.60	169.14	0.54	5.000	24.000	215.000	NIL	14.000	NIL	205.000	NIL	NIL
169.14	169.43	0.29	NIL	12.000	370.000	NIL	17.000	24.000	210.000	10.000	24.000
169.43	169.78	0.35	52.000	1590.000	72.000	2.400	28.000	32.000	460.000	15.000	56.000
169.78	170.03	0.25	48.000	515.000	76.000	1.500	30.000	22.000	370.000	5.000	28.000
170.03	170.46	0.43	30.000	185.000	122.000	0.400	48.000	26.000	73.000	NIL	8.000
170.46	170.78	0.32	12.000	150.000	114.000	0.900	43.000	14.000	52.000	NIL	NIL

alteration. 149.5-151.8, fine grained, chilled?, mod. foliated. Mod-strong Chl-calcite alt, +/weak serpintinization. No phenocrysts. 151.8-169.4, Transitional to med. grained pyroxenite-pyroxenitic gabbro, tr-1% Py. Patchy coarse k-spar as rare med.-lg. aggregates present from 153.3-154.05. Calcite-chlorite decrease with greater depth, replaced by serpentine. Interval averages about 50-60% subhedral pyroxene, 1-5mm, remainder pale green to whitish interstitial groundmass of fine alt products-largely from olivine breakdown?-Unit reaches max. grain size at 164-165m, and gradually fines with greater depth. tr magnetism at lower contact.

LITHOLOGICAL DESCRIPTION

med.-coarse grained, medium-dark green. Apparently reasonably homogeneous in composition, varying mainly in grain size and degree of groundmass

ALTERATION: Weak calcite alt along fractures, grain boundaries, and pseudomorphing plagioclase? above 155m. tr 1% sm.-lg. Py aggregates above 167m. At 167.3, tr 1% Py Po, tr Cp present below 167.5. tr < 1% Po, tr Cp.

STRUCTURE: Top contact irregular. Intermixed, possibly in part due to minor movement along fractures, over about 40cm. Rather than dacitic inclusions contact

### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	'S				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		hosts, zone "flame structures" of mafic material extending into												
		hornfelsed dacite. Foliation variable from 35-55 to												
		CA, averaging about 45.												
		Massive, subhedral equigranular. High Po.												
		- 169.4 to 170.79: Fine-very fine grained-chilled?-												
		weakly-mod foliated, strongly magnetic throughout												
		with abundant sulphide for top .67m and partly												
		assimilated dacite inclusions, within lowermost												
		.78m. Interval appears intensely deformed, but												
		not quite sheared owing to contorted nature of fabric.												
		Lowermost 78m appears, to consist largely of												
		serpentine, Chl,+ magnetite, 5% dacitic inclusions												
		and sulphide.												
		ALTERATION: At 169.4 Po content goes from trace												
		abruptly to 3-5%. By 169.5, 15-20% and by 169.55,												
		25-30%. Average 30-40% Po, 1% Cp from 169.4-												
		170.13 with minor dacite inclusions. Min. disseminated												
•		to "semi-massive" streaks parallel to foliation, verging												
		on net textured. Below 170.3, transition to 3-4% disseminated												
		Po as med. sized aggregates/foliation parallel streaks,												
		less than or equal to, 1% Cp significant-up to 30%?-												
		magnetite.												
		STRUCTURE: Foliation within lowermost .5m averages												
		about 45 to CA. Foliation offset by minor fractures												
		variable from 35-65 to CA, avg. probably 45-50.												

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### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pib ppm	Со ррт	Ni ppm	Pt ppb	Pol ppolo	
		Lower contact sharp, somewhat irregular, subconcordant,													
		averaging approx. 60 to CA. Foliation in dacite 55-65													
		to CA.													
170.79	192.9	FINE-MED. QID (QID. fg-mg) - similar to interval	170.78	171.03	0.25	10.000	24.000	550.000	0.800	185.000	NIL	6.000	NIL	NIL	
		from 18.85-44.8, 1-3% smmed. sized gtz eyes. Weakly	171.03	171.83	0.80	5.000	32.000	38.000	NIL	2.000	NIL	NIL	NIL	NIL	
		banded due to bleaching along foliation planes and	183.18	183.80	0.62	15.000	9.000	81.000	NIL	NIL	NIL	NIL	NIL	NIL	
		subconcordant fractures. 170.79-172.2, weak-mod.	183.80	184.25	0.45	30.000	21.000	75.000	NIL	NIL	NIL	NIL	NIL	NIL	
		pervasive k-spar alt, strongest at contact. 172.2-178.4	191.65	192.50	0.85	10.000	6.000	25.000	NIL	NIL	NIL	NIL	NIL	NIL	
		k-spar alt largely restricted to foliation slips/fractures.													
		189.5-193.0, interval strongly fractured to shattered,													
		cemmented with mm scale calcite fillings.													
		ALTERATION: 2-3% fine disseminated Py on avg. 3-4% Py													
		from 183.2-183.4. Small rare patches and streaks													
		of remobilized qtz-calcite-Chl-Py occur below													
		about 178m generally developed parallel to foliation.													
		Narrow subconcordant to Crosscutting qtz-Py veinlets													
		at 181.2, 183.8.													
		•													
		STRUCTURE: Top contact sharp, somewhat irregular													
		subconcordant, averages 60-65 to CA. Foliation													
		50 to CA at 171m, 45 at 172m, 30-40 at 172.5-174m,													
		40-45 at 174-177m, 45-55 from 177-189m. Foliation													
		40-45 to CA at 190m.													

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#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
192.9	200.05	FINE PYRITIC SEDIMENTS (Fine Pyritic Sediments) -	192.50	193.03	0.53	30.000	77.000	970.000	0.300	10.000	NIL	NIL	NIL	NIL
		possibly with interbedded ash tuffs, and or chemical sed.	193.03	193.92	0.89	75.000	134.000	1130.000	0.700	7.000	NIL	NIL	NIL	NIL
		Fine grained, dark grey-brown to green-black. Well	193.92	195.27	1.35	50.000	72.000	340.000	0.300	8.000	NIL	NIL	NIL	NIL
		foliated streaked to banded with Py, brown biotie, and	195.27	196.15	0.88	45.000	88,000	200.000	0.400	2.000	NIL	NIL	NIL	NIL
		green chloritic bands through a dark grey silicious rock.	196.15	196.74	0.59	20.000	103.000	225.000	NIL	2,000	NIL	NIL	NIL	NIL
		Argillaceous in appearance and hardness, but mod-strongly	196.74	197.54	0.80	15.000	99.000	155.000	0.200	NIL	NIL	NIL	NIL	NIL
		magnetic from 196-200.05.	197.54	198.66	1.12	NIL	102.000	149.000	0.200	NIL	NIL	51.000	NIL	NIL
			198.66	199.23	0.57	45.000	138.000	265.000	1.600	NIL	NIL	83.000	NIL	NIL
		ALTERATION: tr fine sphalerite in places along	199.23	199.48	0.25	15.000	150.000	176.000	0.500	NIL	NIL	61.000	NIL	NIL
		essentially CA parallel calcite stringers <1-2cm wide.	199.48	200.05	0.57	25.000	108.000	210.000	0.900	NIL	NIL	54.000	NIL	NIL
		Unit 3-5% disseminated med. size Py aggregates above 195.5.												
		5-7% Py on average from 195.5-200, disseminated to banded												
		locally to 10% over .5m. 2-3% from 200-201.1. Po occurs												
		with Py in two 1-3cm wide bands of disseminated, sulphide												
		at 199.5, foliation parallel.												
		•												
		STRUCTURE: Foliation 45-50 to CA from 190-193.	•											
		Units in fault contact over 40cm along calcite rich												
		stringer parallel to CA, traceable over 1.9m of core												
		length. Apparent offset 40cm, confirmed by Crosscutting												
		1cm wide gv. Contact foliation parallel at 45 to CA.												
200.05	204.4	FINE-MED. QID (QID, fg-mg) - similar to	200.05	201.10	1.05	15.000	84.000	320.000	0.300	4.000	NIL	46.000	NIL	NIL
		interval from 170.79-192.9, but with fewer eyes.	201.10	202.53	1.43	10.000	31.000	138.000	NIL	7.000	NIL	12.000	NIL	NIL
		Strongly fractured to shattered.	202.53	203.93	1.40	NIL	75.000	95.000	NIL	NIL	NIL	NIL	NIL	NIL
		• ALTERATION: 2-3% fine-med. grained disseminated Py.												

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9613

FROM       TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppm       Pb ppm       Co ppm       Ni ppm       Pt ppb       Pd ppb         204.4       205.85       FINE PYRITIC SEDIMENT (fine Pyritic Sediment) - similar to interval from 192,9-200.05, Uell foliated, banded. 205.3 Crosscutting to subconcordant 5-8cm wide calcite rich veln with, tr Sph and 15-20% unidentified translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorie in mode of occurrence, but with equal or greater hardness than fsp.       205.45       206.40       0.51       65.000       132.000       420.000       0.600       26.000       NIL       NIL       NIL       NIL       NIL       NIL         205.85       207.4       Dolitic Crystal TUFF (QID, fg) - fine       205.49       206.00       0.51       65.000       132.000       420.000       1.000       100.000       NIL       NIL <th></th>															
FROM       TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ng ppm       Co ppm       Ni ppm       Pt ppb       Pd ppb         206.4       205.85       FINE PYRITIC SEDIMENT (fine Pyritic Sediment) - similar to interval from 192.9-200.05. Well foliated, banded. 205.3 Crosscutting to subconcordant 5-8cm wide calcite rich veln with, tr Sph and 15-20% unidentified translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater hardness than fsp.       205.45       205.44       0.27       85.000       183.000       1480.000       1.000       190.000       NIL										c .					
FROM       TO       LINUCUCICAL DESCRIPTION       FROM       TO       WIDIN       Ad pade to pain       Zn pain       Ad pade       Co pain       Zn pain       Ad pade       Co pain       Zn pain <thzn <="" pain<="" th=""><th></th><th></th><th>50.04</th><th>70</th><th></th><th></th><th>C</th><th>7</th><th>A33A1</th><th>0h</th><th>Ca</th><th>Ninom</th><th>0.*</th><th>Ord amb</th><th></th></thzn>			50.04	70			C	7	A33A1	0h	Ca	Ninom	0.*	Ord amb	
204.4 205.85 FIME PYRITIC SEDIMENT (fine Pyritic Sediment) - similar to interval from 192.9-200.05. Well foliated, banded. 205.3 Crosscutting to subconcordent 5-8cm wide calcite rich vein with, tr Sph and 15-20X unidentified translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater hardness than fsp. ALTERATION: 10-15X disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL NIL NIL	FROM TO	LITHULOGICAL DESCRIPTION	rkun	10	ATOLH	Au ppo	cu ppm	zn ppa	му ррн	Poppin	co ppm	кт ррш	ει μου	Pa ppu	
204.4 205.85 FINE PYRITIC SEDIMENT (fine Pyritic Sediment) - similar to interval from 192.9-200.05. Well foliated, banded 205.3 Crosscutting to subcorcordant 5-8cm wide calcite rich vein with, tr Sph and 15-20% unidentified translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater hardness than fsp. ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 PACITIC CRYSTAL TUFF (q1D, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL NIL NIL		·													
204.4 205.85 FINE PYRITIC SEDIMENT (Fine Pyritic Sediment) - similar to interval from 192.9-200.05. Well foliated, banded. 205.3 Crosscutting to subconcordant 5-8cm wide calcite rich vein with, tr Sph and 15-20% unidentified translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater hardness than fsp. ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.97 205.04 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL NIL NIL NIL NIL		SINULIURE: FOLIATION 45 to LA TRACTURING RANDOM.													
204.4 205.85 FINE PYRITIC SEDIMENT (fine Pyritic Sediment) - similar to interval from 192.9-200.05. Well foliated, banded. 205.3 Crosscutting to subconcordant 5-8cm wide calcite rich vein with, tr Sph and 15-20% unidentified translucent cream-very pale yellow-green mineral. Resembles, barlite, scheelite, or fluorite in mode of occurrence, but with equal or greater hardness than fsp. ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL NIL NIL NIL															
similar to interval from 192.9-200.05. Well foliated, banded. 205.3 Crosscutting to subconcordant 5-8cm wide calcite rich vein with, tr Sph and 15-20% unidentified translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater handness than fsp. ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL NIL	204.4 205.85	FINE PYRITIC SEDIMENT (fine Pyritic Sediment) -	203.93	204.56	0.63	NIL	24.000	395.000	NIL	22.000	NIL	NIL	NIL	NIL	
banded. 205.3 Crosscutting to subconcordant 5-8cm wide calcite rich vein with, tr Sph and 15-20% unidentified translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater handness than fsp.		similar to interval from 192 9-200.05. Well foliated	204.56	205.17	0.61	160.000	160.000	1400.000	1.200	35.000	NIL	NIL	NIL	NIL	
<pre>calcite rich vein with, tr Sph and 15-20% unidentified translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater hardness than fsp. ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA.</pre>		banded 205 3 Crosscutting to subconcordent 5-8cm wide	205 17	205 44	0.27	85.000	183 000	1480.000	1.000	190.000	NTI	NIL	NIL	NTL	
<pre>catchie field very with, of spin and is zow underfined translucent cream-very pale yellow-green mineral. Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater hardness than fsp ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL</pre>		calcite rich vein with tr Sch and 15-20% unidentified	205111		0.27	0,,,,,,,									
Resembles, barite, scheelite, or fluorite in mode of occurrence, but with equal or greater hardness than fsp. ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL		therefuent community of an and so to different													
<pre>resembles, carte, scheette, or floorte in mode of occurrence, but with equal or greater hardness than fsp. ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA.</pre>		Describles hapits schoolite on flucoite in mode of													
205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL		resemptes, dante, scheette, of fluoite in mode of													
ALTERATION: 10-15% disseminated to banded Py generally fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL		occurrence, but with equat or greater hardness than rsp.													
ALIERATION: 10-152 disseminated to banded Fy generatly fine. Weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL		•													
Tine. weakly magnetic throughout. STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL		ALIERATION: 10-15% disseminated to banded by generatly													
STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL		fine. weakly magnetic throughout.													
STRUCTURE: Foliation 45-55 to CA. 205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL															
205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL NIL		SIRUCIURE: Foliation 45-55 to CA.													
205.85 207.4 DACITIC CRYSTAL TUFF (QID, fg) - fine 205.49 206.00 0.51 65.000 132.000 420.000 0.600 26.000 NIL NIL NIL NIL NIL															
	205.85 207.4	DACITIC CRYSTAL TUFF (QID, fg) - fine	205.49	206.00	0.51	65.000	132.000	420.000	0.600	26.000	NIL	NIL	NIL	NIL	
grained, dark grey. Nearly identical to interval from 206.00 207.17 1.17 15.000 23.000 170.000 NIL 7.000 NIL NIL NIL NIL NIL NIL		grained, dark grey. Nearly identical to interval from	206.00	207.17	1.17	15.000	23.000	170.000	NIL	7.000	NJL	NIL	NIL	NIL	
200.05-204.4. but generally unfractured, and without		200.05-204.4, but generally unfractured, and without													
atz eves.		atz eves.													
ALTERATION: 2-3% fine disseminated Py. 3-5% over 15cm		ALTERATION: 2-3% fine disseminated Pv. 3-5% over 15cm													
at both contacts "absorbed" from sediments.		at both contacts "absorbed" from sediments.													
		,,,,,,, _													
STRUCTURE: Foliation generally 50 to CA. 45-50		STRUCTURE: Foliation generally 50 to CA, 45-50													
at lower contact		at lower contact.													
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## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	<b></b> s					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Coppra	Ni ppm	Pt ppb	Pd ppb	
207.4	210.0	FINE PYRITIC SEDIMENT (Fine Pyritic Sediment) -	207.17	208.05	0.88	30.000	117.000	214.000	0.300	1.000	NIL	NIL	NIL	NIL	
		similar to interval from 204.4-205.85.	208.05	209.00	0.95	25.000	260.000	248.000	0.400	NIL	NIL	NIL	NIL	NIL	
			209.00	209.96	0.96	80.000	161.000	3900.000	0.400	NIL	NIL	NIL	NIL	NIL	
		ALTERATION: 7-8% generally fine disseminated to banded													
		Py, up to 10-15% over 10-25cm.													
		Sixueluke: Foliation 50-55 to LA. Lower contact													
		40 to CA Epilation 50 from 211-215													
210.0	215.05	FINE-MED. GRAINED QID (Q1D, fg-mg) -													
		similar to interval from 200.05-204.4, weakly banded.													
		ALTERATION: 1-3% fine disseminated Py.													
215 05	721 05	ATT BORDHYRY INTRICTVE (ATT Bacob Interie ) -													
212.05	221.75	mey contain fenz similar to interval from 52 15-59 3 but													
		fine grained, dark grey, with 2-3% medlg, deep blue gtz													
		eves. 1-2% fine fsp phenocrysts only visible in places.													
		•													
		ALTERATION: 2-3% fine disseminated Py, some euhedral.													
		STRUCTURE: Contact subconcordant 40-45 to CA.													
		Foliation, banding along fractures 50-55 to CA.													

### DIAMOND DRILL LOG PROPERTY: Richardson Page 17 HOLE No.: NR9613 ASSAYS TO WIDTH Auppeb Cuppen Znppen Agippen Polppen Coppen Nippen Ptippeb Polppeb LITHOLOGICAL DESCRIPTION FROM FROM TO 221.95 227.32 COARSE GID ( GID, cg) - Possibly a flow. Medium grey-green, with 5-7% med.-lg. qtz eyes. Strongly foliated, with several medium grained sections containing up to 20% fine mafic silicates. Unit contains 1-2% fine-med. fsp phenocrysts, up to 5% locally, occasionally coarse grained. ALTERATION: 1-3% sm.-lg. Py aggregates 1-3mm. Less than or equal to 1mm wide seams of tourmaline along subconcordant fractures at 225.4, 225.6. tr garnet at 224.6, 224.9. 1%-2-3% fine-coarse, < 2mm garnet present locally below 225.25. STRUCTURE: Foliation 55 to CA at 225. 50 to CA at 226.5. 227.32 227.74 PYRITIC SEDIMENT (Pyritic Sediment) - Medium grained, dark grey. Similar to previous intervals of this unit, but containing appreciably more feldspathic constituents. Probably an arenite or grey wacke rather than an argillite. ALTERATION: 8-10% sm.-med. Py aggregates on average, 10-12% over upper 1/2 of this unit. .

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#### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

-									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		STRUCTURE: Foliation 55 to CA.												
227.74	380.1	FINE-MED DID (DID fa-ma) - fine-med grained	227.30	227.84	0.54	90.000	210.000	390.000	0.800	NTL	NIL	NTL	NTL	NIL
		arev-light green. Strongly foljated, 3-5% smmed. atz	233.56	234.24	0.68	90.000	44.000	600.000	0.400	40.000	NIL	NIL	NIL	NIL
		eyes, locally up to 7-8% over 20-50cm. Weakly-mod	235.50	236.35	0.85	65.000	41.000	200.000	0.400	17.000	NIL	NIL	NIL	NIL
		bleached, sericitized, and banded throughout. Averaging	236.35	236.92	0.57	540.000	21.000	120.000	0.200	24.000	NIL	NIL	NIL	NIL
		less than or equal to, 1% vein material from subconcordant	236.92	238.10	1.18	135.000	16.000	250.000	0.200	18.000	NIL	NIL	NIL	NIL
		to Crosscutting 2mm-1cm wide qtz +/- Calc-Chl-Py, tr Cp	238.10	238.58	0.48	220.000	8.000	205.000	0.200	22.000	NIL	NIL	NTL	NIL
		stringers.	238.58	239.15	0.57	75.000	34.000	460.000	0.300	23.000	NIL	NIL	NIL	NIL
		•	239.15	239.50	0.35	65.000	23.000	330.000	0.700	40.000	NIL	NIL	NIL	NIL
		ALTERATION: Fine-coarse garnet present locally at	239.50	240.47	0.97	385.000	20.000	135.000	0.300	26.000	NIL	NIL	NIL	NIL
		levels up to 2-3% over 10cm between 227.74 and mafic	240.47	241.97	1.50	225.000	19.000	260.000	0.700	44.000	NIL	NIL	NIL	NIL
		dykes at 248.7. Below 249 garnet content averages 1%.	241.97	242.60	0.63	70.000	34.000	160.000	1.000	62.000	NIL	NIL	NIL	NIL
		3-4% fine disseminated Py with some as rare narrow, less than	242.60	243.91	1.31	75.000	31.000	165.000	0.400	60.000	NIL	NIL	NIL	NIL
		or equal to, 1mm streaks/seams parallel to foliation. tr	243.91	244.39	0.48	230.000	154.000	270.000	1.600	116.000	NIL	NIL	NJL	NIL
		disseminated Sph at 233, 238.3.	244.83	245.17	0.34	70.000	24.000	90.000	0.400	70.000	NIL	NIL	NIL	NIL
		•	248.40	248.85	0.45	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 55 to CA at 230, 45 at 231, 45-	248.85	249.22	0.37	115.000	34.000	27.000	0.600	30,000	NIL	NIL	NIL	NIL
		50 at 232, foliation 55 to CA at 235-248.5. Weak kinking	249.22	250.72	1.50	55.000	19.000	75.000	NIL	34.000	NIL	NIL	NIL	NIL
		occasionally present below 236m.	250.72	252.20	1.48	40.000	15.000	69.000	NIL	32,000	NIL	NIL	NIL	NIL
		•	252.20	252.72	0.52	70.000	12.000	93.000	NIL	90.000	NIL	NIL	NIL	NIL
		244.0 to 244.25: Several tension gash like qtz veins.	252.72	254.08	1.36	35.000	12.000	74.000	NIL	95.000	NIL	NIL	NIL	NIL
			254.08	254.55	0.47	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
		ALTERATION: Within qtz 1% Py, tr Sp, Cp.	254.55	255.82	1.27	20.000	10.000	44.000	NIL	24.000	NIL	NIL	NIL	NIL
		•	255.82	256.23	0.41	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: Vein contacts crosscut foliation	261.60	262.00	0.40	75.000	36.000	143.000	0.600	27.000	NIL	NIL	NIL	NIL
		at nearly 90 degrees-45-50 to CA.	265.00	265.71	0.71	65.000	21.000	342.000	0.800	86.000	NIL	NIL	NIL	NIL

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# DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s					
FROM	10	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
			265.71	267.00	1.29	100.000	40.000	830.000	1.300	186.000	NIL	NIL	NIL	NIL	
		248.38 to 248.84: Mafic dyke, fine grained, dark green	267.00	268.20	1.20	115.000	19.000	510.000	0.500	56.000	NIL	NIL	NIL	NIL	
		pyroxenitic gabbro?	268.20	268.76	0.56	135.000	37.000	3100.000	1.100	112.000	NIL	NIL	NIL	NIL	
		•	268.76	269.41	0.65	90.000	24.000	780.000	0.600	62.000	NIL	NIL	NIL	NIL	
		ALTERATION: 3-4% fine disseminated Py.	269.71	270.00	0.29	1090.000	157.000	3300.000	4.500	278.000	NIL	NIL	NIL	NIL	
		•	270.00	271.20	1.20	615.000	41.000	2200.000	1.100	132.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Dyke contacts crosscutting at 45 to CA.	274.86	275.18	0.32	360.000	780.000	760.000	1.700	110.000	NIL	NIL	NIL	NIL	
			276.28	276.75	0.47	135.000	21.000	375.000	0.500	70.000	NIL	NIL	NIL	NIL	
		254.1 to 254.55: Mafic dyke, similar to 244-244.25,	282.82	283.64	0.82	550.000	102.000	3600.000	2.200	780.000	NJL	NIL	NIL	NIL	
		with qtz-Calc-Py stringer at top contact. Coarse calcite	283.64	284.22	0.58	2730.000	335.000	3000.000	3.100	680,000	NIL	NIL	NIL	NIL	
		filling open fracture at approx. 90 to CA, 1cm wide at	284.22	284.92	0.70	935.000	26.000	155.000	0.600	172.000	NIL	NIL	NIL	NIL	
		254.12.	284.92	285.66	0.74	505.000	40.000	1780.000	0.500	135.000	NIL	NIL	NIL	NIL	
			285.66	286.80	1.14	350.000	47.000	1750.000	0.700	160.000	NIL	NIL	NIL	NIL	
		ALTERATION: 249.0, three bands of disseminated Py up to 1cm	286.80	288.30	1,50	205.000	34.000	1500.000	0.700	420.000	NIL	NIL	NIL	NIL	
		wide. 1% v. fine disseminated Py.	292.64	292.90	0.26	415.000	188.000	4100.000	1.100	195.000	NIL	NIL	NIL	NIL	
			292.90	293.55	0.65	210.000	33.000	450.000	0.300	112.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Contacts concordant-subconcordant at	293.55	293.92	0.37	250.000	25.000	110.000	0.200	67.000	NIL	NIL	NIL	NIL	
		approx. 50 to CA.	297.40	298.10	0,70	230.000	29.000	595.000	0.500	222.000	NIL	NIL	NIL	NIL	
		•	298.10	298.98	0.88	210.000	155.000	3300.000	1.100	375.000	NIL	NIL	NIL	NIL	
		255.85 to 256.25: Mafic dyke similar to interval from	298.98	300.40	1.42	160.000	152.000	3400.000	1.100	165.000	NIL	NIL	NIL	NIL	
		244.0-244.25.	300.40	301.45	1.05	130.000	70.000	1680.000	0.700	53.000	NIL	NIL	NIL	NIL	
			301.45	302.30	0.85	150.000	19.000	515.000	0.300	39,000	NIL	NIL	NIL	NIL	
		ALTERATION: 3-5% fine disseminated Py.	302.30	303.50	1.20	205.000	95.000	2000.000	0.800	51.000	NIL	NIL	NIL	NIL	
			303.50	304.82	1.32	285.000	26.000	835.000	0.500	105.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Foliation 50-55 to CA. Crosscutting contacts	304.82	305.24	0.42	1730.000	460.000	9650.000	2.600	600.000	NIL	NIL	NIL	NIL	
		top 35, bottom 25 to CA.	305.24	305.60	0.36	355.000	48.000	1050.000	0.900	92.000	NIL	NIL	NIL	NIL	
		•	305.60	306.60	1.00	560.000	118.000	3950.000	0.900	84.000	NIL	NIL	NIL	NIL	
		257.52 to 257.83; Mafic dyke similar to interval	306.60	307.08	0.48	490.000	134.000	2800.000	1.000	29.000	NIL	NIL	NIL	NIL	

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

								ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH Auppo	Cuppm	Znpprn	Ag ppm	Pb ppm	Coppan	Nippm	Pt ppb	Pd ppb	
		from 244~244.25.	307.08	307.54	0.46 6870.00	360.000	0.015	5.200	172.000	NIL	NIL	NIL	NIL	
			307.54	309.60	2.06 1270.00	118.000	1700.000	1.300	43.000	NIL	NIL	' NIL	NIL	
		ALTERATION: 2-3% fine disseminated Py.	309.60	310.66	1.06 375.00	38.000	2000.000	0.400	32.000	NIL	NIL	NIL	NIL	
		•	310.66	311.81	1.15 1670.00	48.000	1750.000	0.800	33.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Contacts Crosscutting 30 to CA.	311.81	312.33	0.52 1220.00	48.000	4350,000	0.700	32.000	NIL	NIL	NIL	NIL	
		•	312.33	313.23	0.90 250.00	42.000	1800,000	NIL	24.000	NIL	NIL	NIL	NIL	
		257,83 to 269.75: 1-2% fine garnets present.	313.23	314.15	0.92 330.00	60.000	2030.000	0.500	29.000	NIL	NIL	NIL	NIL	
		Subconcordant qtz-Py veins at 262, 262.1, 265.1, 265.4,	314.15	315.37	1.22 165.00	102.000	3150.000	0.600	25.000	NIL	NIL	NIL	NIL	
		1-2cm wide.	315.37	316.62	1.25 465.00	81.000	3000.000	0.500	45.000	NIL	NIL	NIL	NIL	
			316.62	317.52	0.90 220.00	80.000	2250.000	0.500	35.000	NIL	NIL	NIL	NIL	
		ALTERATION: tr Sp present from place to	317.52	318.40	0.88 245.00	105.000	6650.000	0.700	44.000	NIL	NIL	NIL	NIL	
		place below 259m.	318.40	319.36	0.96 120.00	62.000	1730.000	0.400	47.000	NIL	NIL	NIL	NIL	
			319.36	320.12	0.76 120.00	36.000	1180.000	0.200	40.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Foliation 55 to CA at 257.	320.12	320.73	0.61 270.00	111.000	2280.000	0.600	48.000	NIL	NIL	NIL	NIL	
			320.73	321.23	0.50 125.00	140.000	4200.000	0.800	49.000	NIL	NIL	NIL	NIL	
		267.0-273.15: Medium grained interval with 1-3% qtz	321.23	321.86	0.63 125.00	59.000	1700.000	0.400	31.000	NIL	NIL	NIL	NIL	
		eyes weakly banded.	321.86	322.43	0.57 115.00	31.000	870.000	0.400	38.000	NIL	NIL	NIL	NIL	
		•	322.43	322.85	0.42 140.00	145.000	5400.000	0.800	49.000	NIL	NIL	NIL	NIL	
		ALTERATION: 2-3% fine disseminated Py. Gnt. disappears	322.85	323.95	1.10 180.00	19.000	1270.000	0.500	54.000	NIL	NIL	NIL	NIL	
		abruptly at 273.15. Minor galena in a 2 x 3cm patch	323.95	324.80	0.85 300.00	48.000	1300.000	0.700	62.000	NIL	NIL	NIL	NTL	
		of qtz-calcite at 276.5m. Garnet present locally at	324.80	325.60	0.80 250.00	62.000	1850.000	0.600	47.000	NIL	NIL	NIL	NIL	
		< 1% level below 281m, usually within remobilized	325.60	326.80	1.20 275.00	50.000	1440.000	0.600	42.000	NIL	NIL	NIL	NIL	
		qtz-Calc-Chl-Py streaks. Below 286, rock poss. 1%	326.80	327.62	0.82 350.00	65.000	1700.000	0.300	47.000	NIL	NIL	NIL	NIL	
		fine disseminated Gnt. on average. Locally to 3-4% over 15cm.	327.62	328.31	0.69 1210.00	117.000	5230.000	1.000	53.000	NIL	NIL	NIL	NIL	
		•	328.31	329.25	0.94 60.00	26.000	1350.000	0.200	21.000	NIL	NIL	NIL	NIL	
		269.75 to 270: Py-qtz-Calcite stringers 2-5cm	329.25	330.05	0.80 140.00	131.000	4220.000	0.500	36.000	NIL	NIL	NIL	NIL	
		wide, subconcordant to Crosscutting.	330.05	330.49	0.44 100.00	51.000	1080.000	NIL	24.000	NIL	NIL	NIL	NIL	
		•	332.68	333.19	0.51 240.00	96.000	7800.000	0.600	60.000	NIL	NIL	NIL	NIL	

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		ALTERATION: 10-15% v. fine Py over 25cm.	333.19	333.68	0.49	60.000	62.000	1600.000	0.500	88.000	NIL	NIL	NIL	NIL
			333.68	334.93	1.25	55.000	32.000	305.000	NIL	42.000	NIL	NIL	NIL	NIL
		283.15 to 284.9: streaked/splashed with dark grey wisps	334.93	336.21	1.28	30.000	34.000	580.000	0.300	45.000	NIL	NIL	NIL	NIL.
		of remobilized qtz-3-5% of rock-up to 5 x 2cm long.	336.21	337.10	0.89	310.000	53.000	960.000	0.400	50.000	NIL	NIL	NIL	NIL
			337.10	337.50	0.40	785.000	138.000 3	3000.000	0.600	13.000	NIL	NIL	NIL	NIL
		ALTERATION: 3-5% disseminated to somewhat banded Py. tr.	337.50	338.20	0.70	1120.000	100.000	2600.000	0.900	28.000	NIL	NIL	NIL	NIL
		disseminated Sph at 285.5.	338.20	338.95	0.75	330.000	49.000	1050.000	NIL	16.000	NIL	NIL	NIL	NIL
			338.95	339.55	0.60	180.000	26.000	200.000	NIL	13.000	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 50 to CA, weakly kinked.	339.55	340.35	0.80	360.000	82.000 4	4400.000	1.900	96.000	NIL	NIL	NIL	NIL
			340.35	340.95	0.60	1940.000	1300.000	0.014	5.000	133.000	NIL	NIL	NIL	NIL
		COMMENTS: Interval from 273.15-fine grained.	340.95	341.22	0.27	510.000	78.000	700.000	1.900	76.000	NIL	NIL	NIL	NIL
		•	341.22	342.04	0.82	610.000	<b>39.00</b> 0 '	1850.000	0.500	40.000	NIL	NIL	NIL	NIL
		290.8: Subconcordant, irregular walled qtz vein.	342.04	342.47	0.43	435.000	220.000 0	6950.000	2.500	43.000	NIL	NIL	NIL	NIL
			342.47	343.11	0.64	210.000	44.000	1750.000	0.600	16.000	NIL	NIL	NIL	NIL
		ALTERATION: 1-2% Sph within vein, tr Sph in wallrock.	343.11	343.52	0.41	360.000	106.000	3800.000	1,200	96.000	NIL	NIL	NIL	NIL
		•	343.52	343.80	0.28	90.000	24.000	1200.000	0.200	24.000	NIL	NIL	NIL	NIL
		STRUCTURE: Vein at 30 to CA, foliation 50 to CA.	343.80	344.46	0.66	180.000	51.000 3	3500.000	0.800	47.000	NIL	NIL	NIL	NIL
		•	344.46	345.62	1.16	150.000	32.000	1280.000	1.800	230.000	NIL	NIL	NIL	NIL
		239.9: Crosscutting 1-2cm wide qv.	345.62	346.20	0.58	135.000	33.000	620.000	0.700	88.000	NIL	NIL	NIL	NIL
		•	346.20	347.05	0.85	100.000	24.000	735.000	0.200	13.000	NIL	NIL	NIL	NIL
		ALTERATION: 1% Py, tr Cp Gn. tr disseminated Sph from 249.	347.05	347.93	0.88	85.000	13.000	1450.000	0,200	7.000	NIL	NIL	NIL	NIL
		•	347.93	348.93	1.00	105.000	15.000	930.000	NIL	4.000	NIL	NIL	NIL	NIL
		299 to 304.5: Weakly mineralized	348.93	349.47	0.54	120.000	18.000	5750.000	0.700	9.000	NIL	NIL	NIL	NIL
		•	349.47	349.82	0.35	155.000	47.000 8	8200.000	1.400	16.000	NIL	NIL	NIL	NIL
		ALTERATION: Less than or equal to, 1% disseminated Sph	349.82	350.77	0.95	85.000	24.000	205.000	0.500	10.000	NIL	NIL	NIL	NIL
		present below about 299.	350.77	351.87	1.10	10.000	5.000	62.000	NIL	29.000	NIL	NIL	NIL	NIL
		•	351.87	352.58	0.71	35.000	7.000	830.000	0.200	17.000	NIL	NIL	NIL	NIL
		STRUCTURE: 3-4% fine disseminated Py also present but very	352.58	353.20	0.62	50.000	4.000	87.000	NIL	19.000	NIL	NIL	NIL	NIL

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9613

FROM

ASSAYS τo LITHOLOGICAL DESCRIPTION FROM TO WIDTH Au ppb Cupprn Znpprn Ag ppm Pb ppm Co ppm Ni ppm Pt ppb Pd ppb rarely as bands/seams. 353.20 353.94 0.74 35.000 9.000 280.000 0.200 12.000 NIL NIL NIL NIL NIL NIL 353.94 354.82 0.88 15.000 6.000 273.000 NIL 7.000 NIL NIL 304.5 to 318: "Well" mineralized with Sph. 354.82 355.30 25.000 32,000 2250,000 NIL 14.000 NIL NIL NIL NIL 0.48 355.30 356.02 0.72 30.000 8.000 230.000 NIL 4.000 NIL NIL NIL NIL 356.83 0.700 5,000 NIL NIL NIL NIL ALTERATION: Subconcordant to Crosscutting fracture-356.24 0.59 80.000 91.000 1230.000 controlled Sph seams occur below 304.5-318.0, in 356.83 357.51 0.68 115.000 68.000 3800.000 0.900 6.000 NIL NIL NTI NIL addition to disseminations, best intervals, less than 357.51 358,40 0.89 225,000 26.000 1180.000 1,000 20.000 NIL NIL NIL NIL or equal to, 2% Sph over .5m at 305.25 with 5-7% Py. 358.40 358.98 0.58 205.000 49,000 2600,000 1.000 19.000 NIL NIL NIL NIL 307.5, 312.25, 317.75. 358.98 359.42 0.44 170.000 36.000 1850.000 0.600 4,000 NIL NIL NIL NIL 360.45 1.03 145.000 0.300 7.000 NIL NIL NIL NIL 359.42 34.000 860.000 318-330: Moderately mineralized, weak sericitization. 360.45 361.40 0.95 155.000 48.000 190.000 0.200 7.000 NIL NIL NIL NIL 361.85 5,000 NIL NIL NIL NIL Well foliated, banded-05-2cm scale-to weakly sheared 361.40 0.45 205.000 27.000 105.000 NIL with numerous narrow sericite rich shear 317-planes. 361.85 362.68 0.83 330.000 30.000 500.000 0.300 10.000 NIL NIL NIL NIL 362.96 1.000 18.000 NIL NIL 362.68 0.28 500.000 56.000 195.000 NIL NIL ALTERATION: Below about 317 Gnt. largely restricted 362.96 363.27 0.31 180.000 58,000 2900,000 1.000 28,000 NIL NIL NIL NIL to small wispy patches of remobilized material. Average 363.27 364.17 0.90 370,000 104.000 6100.000 1.200 25.000 NIL NIL NIL NIL 364.17 0.52 670.000 NIL NIL level < 1% to trace as is disseminated Sph, concentrated along 364.69 160.000 6800.000 1.400 26.000 NTE NIL 365,13 0.44 655.000 260.000 7200.000 3.400 51.000 NIL NIL NIL sulphide rich foliation parallel shear planes and along 364.69 NIL crosscutting fractures with irregular narrow veinlets and NIL NIL 365.13 365.41 0.28 2640.000 1050.000 4700.000 4.600 48.000 NIL NIL patches of qtz. 365.41 365.54 0.13 475.000 153.000 7900.000 1.400 85.000 NIL NIL NIL NIL 365.54 365.65 0.11 NIL 2000.000 0.086 332.000 280.000 NIL NIL NIL NIL 365.65 365.78 0.13 500.000 57.000 2500.000 1.000 63.000 NIL NIL NIL NIL 335 to 348: Mod.-strongly mineralized interval resembling 318-330m. Sulphides primarily banded along foliation 365.78 366.06 0.28 280.000 130.000 4800.000 1.000 24.000 NIL NIL NIL NIL 366.46 0.40 275.000 48.000 2000.000 0.600 27.000 NIL NIL NIL parallel and less common crosscutting fractures. 366.06 NIL Rock fine grained, less than or equal to, 1% sm. qtz eyes. 366.46 367.02 0.56 200.000 130,000 3700,000 1.000 28.000 NIL NIL NIL NIL 367.02 367.50 0.48 200.000 60.000 3300.000 0.600 35,000 NIL NIL NIL NIL 0.400 NIL ALTERATION: 5-7% Py on average locally to 7-8% over 367.50 367.86 0.36 300.000 51.000 3700.000 37.000 NTI NIL NIL 20.000 NIL 5m. Less than or equal to, 1% Sph, up to 1-2% over .3-367.86 368.22 0.36 135.000 43,000 2200,000 0.400 NIL NIL NIL

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### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

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									ASSAY	3					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Со ррт	Nippm	Pt ppb	Pd ppb	
		.5m e.g. 340.5-341, tr Cp, up to, less than or equal to	368.22	368.59	0.37	340.000	55.000	3900.000	0.800	40.000	NIL	NIL	NIL	NIL	
		1% in Sph rich intervals.	368.59	369.02	0.43	480.000	5.000	5100.000	0.400	26.000	NIL	NIL	NIL	NIL	
			369.02	369.50	0.48	355.000	66.000	5100.000	0.600	43.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Foliation 50 to CA at 331m, 55 at 332.5,	369.50	370.10	0.60	190.000	67.000	5100.000	0.600	25.000	NIL	NIL	NIL	NIL	
		50 at 334, 45 at 337, variable from 45-55 from 340-353m.	370.10	370.60	0.50	1090.000	90.000	6200.000	0.900	20.000	NIL	NIL	NIL	NIL	
			370.60	371.08	0.48	420.000	47.000	5200.000	0.600	37.000	NIL	NIL	NIL	NIL	
		COMMENTS: No garnet, no qtz veining of any significance.	371.08	371.29	0.21	285.000	17.000	1400.000	0.400	45.000	NIL	NIL	NIL	NIL	
			371.29	371.54	0.25	250.000	19.000	8900.000	0.600	46.000	NIL	NIL	NIL	NIL	
		348 to 380.1: Fine-med. grained dacite, 2–3% smmed. size	371.54	371.91	0.37	180.000	12.000	1450.000	0.600	31.000	NIL	NIL	NIL	NIL	
		qtz eyes. Weakly-mod. banded due to sericite rich shear planes	371.91	372.46	0.55	155.000	14.000	300.000	0.400	18.000	NIL	NIL	NIL	NIL	
		and disseminated to banded sulphides in places. Including,	372.46	372.77	0.31	300.000	28.000	8800.000	1.000	25.000	NIL	NIL	NIL	NIL	
		363.1-372m, moderately well mineralized interval with	372.77	373.60	0.83	90.000	22.000	312.000	0.300	15.000	NIL	NIL	NIL	NIL	
		locally abundant garnet, 3-4% over 5-10cm, Sulphide	373.60	374.10	0.50	65.000	19.000	145.000	0.200	16.000	NIL	NIL	NIL	NIL	
		qtz seams at 364.6 contorted, Crosscutting, 2-5mm wide, Py	375.00	375.50	0.50	75.000	19.000	67.000	0.200	12.000	NIL	NIL	NIL	NIL	
		only. 365.6, 5cm wide Py, Sp >> Cp > Gn > Au. Au appears	378.20	378.50	0.30	120.000	8.000	120.000	0.300	5.000	NIL	NIL	NIL	NIL	
		to have an affinity for, but not always be enclosed within,	378.50	379.90	1.40	125.000	15.000	88.000	0.300	1.000	NIL	NIL	NIL	NIL	
		or associated with the vein qtz present.	379.90	380.05	0.15	290.000	23.000	47.000	0.900	NIL	NIL	NIL	NIL	NIL	
		365.95, < 1cm wide minor Py, Sp, tr Cp, Gn.													
		368.45, < 1cm wide, Sp, tr Cp. 370.6,													
		2-3cm wide, Sp, Py, tr Cp. 371.40, 2-3mm wide,													
		concordant to Crosscutting, Py, Sp >> Cp.													

ALTERATION: 2-3% fine disseminated Py weakly bleached, weak-mod. sericitization throughout, tr Sph present locally below about 358.5m. Interval averages, 3-5% largely disseminated Py, less than or equal to, 1% Sph, but with several sections, less than or equal to, 5m with 1-2% disseminated to banded Sp, tr Cp along fractures with Sp fine-crs.

HOLE No: NR9613

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION VG present along sulphide rich 5cm wide fracture at 365.6. Gold clustered within 2cm diameter patch on exterior of core, extends 1cm into core. Trace 5-10 fine-v. fine specks, present elsewhere along fracture.	FROM	то	WIDTH	Au ppb	Cuppm	2n ppm	Ag ppm	РЬ ррт	Coppm	Ni ppm	Pt ppb	Pd ppb
		STRUCTURE: Foliation 55-60 to CA from 353-357. Foliation 50 to CA at 357.5 Foliation 55-60 to CA from 358-374m.												
		COMMENTS: Native Au present, with minor qtz Sp, and relatively abundant Cp Gn along 5cm wide concordant sulphide seam fracture filling. Sample 72688:11.5cm, 12% sulphide, 5-7% Py, 5-7% Sp, 1-2% Cp, tr5% Gn? tr1% Au, less than or equal to 2% vein qtz.												
		378.1: Less than or equal to 1cm wide concordant qtz stringer with tourmalinization over 1mm at both contacts.												
		ALTERATION: 372.3-372.7, 1-2% Sp present over 30cm, disseminated to banded similar to interval from 363.1- 372. Garnet averages, less than or equal to, 1% over interval disappearing below 372.75.												
		380 to 380.1: Veined "sheared" contact with tourmaline present along shear planes similar to the mode of occurrence of sericite.												

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Znppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		ALTERATION: Vein 1-2cm wide, 3-5% disseminated to												
		narrowly banded Py, over interval.												
		• STRUCTURE: Foliation vein, contact at 55-60 to CA.												
		Foliation 60-65 to CA from 374-380m.												
380.1	403.98	MEDCRS. QID (QID, mg-cg) - similar to	380.05	380.52	0.47	70.000	55.000	67.000	0.700	4.000	NIL	NIL	NIL	NIL
		interval from 47.35-52.15. Generally unbanded	380.52	380.82	0.30	90.000	15.000	56.000	0.500	3.000	NIL	NIL	NIL	NIL
		weakly-mod. bleached. 3-5% smmed. size qtz eyes.	380.82	381.48	0.66	NIL	3.000	6.000	NIL	NIL	NIL	NIL	NIL	NIL
		3-5% locally to 5-7% fine mafic silicates, as < 1mm	381.48	381.87	0.39	130.000	40.000	5800.000	0.700	4.000	NIL	NIL	NIL	NIL
		clusters with calcite. 380.65-381.85, Crosscutting qtz vein	381.87	383.15	1.28	55.000	63.000	85.000	0.600	10.000	NIL	NIL	NIL	NIL
		largely barren sulphides concentrated along lower	387.88	388.68	0.80	135.000	28.000	126.000	0.300	4.000	NIL	NIL	NIL	NIL
		contact 381.5-381.85 along fractures and as "coarse"	388.68	388.90	0.22	255.000	175.000	4350.000	1.900	5.000	NIL	NIL	NIL	NIL
		grained open space fillings to 1-2cm diameter often with	388.90	389.81	0.91	35.000	43.000	218.000	0.500	43.000	NIL	NIL	NIL	NIL
		calcite. Dacite similar to interval above vein, but coarse	389.81	390.63	0.82	45.000	58.000	180.000	1.000	63.000	NIL	NIL	NIL	NIL
		grained sub-interval contact at 385.88, abrupt grain size	390.63	391.03	0.40	75.000	16.000	253.000	0.500	5,000	NIL	NIL	NIL	NIL
		change; coarse above, fine grading coarser below.	391.03	391.58	0.55	55.000	4.000	42.000	0.200	2.000	NIL	NIL	NIL	NIL
			391.58	392.10	0.52	110.000	1.000	7.000	NIL	3.000	NIL	NIL	NIL	NIL
		ALTERATION: 2-3% fine disseminated Py. Rock locally mod.	392.10	392.64	0.54	NIL	2.000	3.000	NIL	NIL	NIL	NIL	NIL	NIL
		bleached adjacent to the larger qtz veins over core lengths of	392.64	393.44	0.80	NIL	2.000	4.000	NIL	NIL	NIL	NIL	NIL	NIL
		.25-1.0m. Tourmaline is present occasionally as narrow, less	393.44	393.70	0.26	125.000	4.000	17.000	0.400	1.000	NIL	NIL	NIL	NIL
		than or equal to, 1mm wide intergrown fracture fillings from	393.70	394.08	0.38	90.000	17.000	45.000	0.400	6.000	NIL	NIL	NIL	NIL
		382-391. 1-2/30cm along foliation parallel shear planes.	395.90	396.38	0.48	120.000	98.000	35.000	1.800	5.000	NIL	NIL	NIL	NIL
		May also be present as fine crystals in ground mass. 381.5-	396.38	396.70	0.32	15.000	35.000	245.000	NIL	2.000	NIL	NIL	NIL	NIL
		381.85, vein minor Py near top contact, tr calcite throughout	396.70	397.16	0.46	50.000	52.000	62.000	1.000	7.000	NIL	NIL	NIL	NIL
		lower contact 2-3% Sph, 1- <2% Py, tr Gn over 35cm. 2-3%	401.84	402.37	0.53	610.000	75.000	222.000	1.200	2.000	NIL	NIL	NIL	NIL

### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		fine disseminated Py some as <1mm seams along subconcordant					••							
		fractures. Tourmaline present along some concordant-												
		subconcordant fractures. Similar to 382-391. Sulphide Sph												
		-Py, qtz along subconcordant fractures, less than or equal to,												
		1cm wide 1-2% Sp over 20-25cm at 388.75.												
		STRUCTURE: Foliation 60-65 to CA above 387. Foliation 55												
		to CA at 390, 50-55 to CA from 388. Foliation 50-55 to CA												
		at 380.5 due to proximity to veining Vein top contact 15-20												
		to CA. Lower contact, less than or equal to, 10 to CA.												
		•												
		390.6 to 393.6: Qtz vein similar to vein from 380.65-381.85.												
		ALIERATION: Minor Py, tr tourmaline along top contact.												
		·												
		Lower contact over 30-35cm												
		Lowel Contact Over Su-Sum.												
		393.9 to 394.85: CA parallel otz stringer 1mm-1.5cm wide.												
		· · · · · · · · · · · · · · · · · · ·												
		ALTERATION: Tr Py, tourmaline. Minor calcite.												
		396 to 396.75: Qtz vein similar to previous low-angle												
		intersections.												
		•												
		ALTERATION: Minor Py Chi along top contact. 3-4%												
		fine disseminated Py in wallrock.												
		•												

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		STRUCTURE: Top contact occurs over 30-35cm core length.												
		Lower contact, foliation parallel at 40 to CA.												
		COMMENTS: Vein possibly, very irregular, walled.												
		396.45 to 396.65: Peridotitic dyke. Crosscutting fine grained												
		dark green dyke. Weakly foliated, appears to be												
		serpentinized peridotite. Non-magnetic.												
		ALTERATION: 1% fine Py, strong calcite alteration throughout												
		+/- fine Chl serpentine.												
		•												
		STRUCTURE: Dyke top contact planar 40 to CA. Weakly												
		undulatory contact with vein. Lower contact sharp but												
		irregular, parallel to top.												
		•												
		369.75 to 403.98: Coarse dacite, mod bleached. 5-7%												
		medlg. qtz eyes. 3-4% fine disseminated Py.												
		•												
•		ALTERATION: Uniform bleaching ends at 402m. Bleaching												
		restricted to < 1-2cm mod-strongly bleached bands along												
		subconcordant fractures. Some with mm wide Py bands sealing												
		fracture. 3-5% disseminated to banded Py below 402m.												
		SIRUCIURE: FOLIATION 45-50 TO UA at 39/m, steadily increasing												
		το /υ το CA at 401m.												

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
403.98	404.56	ALTERED MAFIC DYKE (Altered Maf. Dyke) - fine grained												
		medium brownish-green. Approx. composition 30-40%												
		dark green amphibole, partly chloritized, 20-30% pale biotite +/-												
		phlogopite. 30% sausseritized plagioclase. 15-20% calcite,												
		assoc. with plagioclase. Crosscutting, weakly foliated, possibly												
		dioritic in original bulk chemistry.												
		ALIERATION: Mod-Strongly calcite altered throughout. If 1% Py,												
		STRUCTURE: Roth contacts prosecut foliation in decites by												
		45-60 Contact 70 to CA Lover contact 50 to CA												
		Foliation $65-70$ to CA at 405m $40-45$ at 408m above 60 to CA												
		at 410m.												
		•												
		404.56: MEDCRS. QID (QID, mg-cg) - similar to interval												
		from 380.1-403.98. 406.95-408.7, long irregular fracture												
		.5-2cm wide, essentially parallel to CA filled with abundant												
		fine chlorite, minor calcite, trace qtz.												
		ALTERATION: 3-4% disseminated Py .5cm wide foliation parallel Py-												
		qtz seam at 406.05 mm wide Sp bands at 408.5, 410, 410.3.												
		STRUCTURE: 50-60 averaging 55 to CA from 412-420.												
		• (10 s. (4) 75. Devided do se star o blooking over 1.10												
		410 to 416./2: Banded que to strong bleaching over 1-10cm												
		intervals, mare narrow sulphice +/- qtz seams.												
		• ALTERATION: 2-3% Pv on average, tr 1% Sph. disseminated to rare												

#### DIAMOND DRILL LOG

### **PROPERTY:** Richardson HOLE No.: NR9613

FROM

ASSAYS TO LITHOLOGICAL DESCRIPTION FROM TO WIDTH Auppolo Cuppon Znopon Agippon Polippon Coppon Nippon Ptippolo Polippol narrow seams from 411.9-412.4, 413.6-414.2, 416.3-416.75. STRUCTURE: 420-433m, foliation 60 to CA. 416.75 to 428: Moderately bleached banded due to sericite concentration along foliation/shear planes. Sulphides disseminated to banded. Identifiable "flow" contacts at 416.85-419.4. ALTERATION: 5-7% disseminated to banded Py, tr 1% Sph over 5cm at 418.4 and over 20-25cm at 419.35, tr Sph at 425.2, 426. Garnet present at tr-1% level from 412.5-416.5. STRUCTURE: tr garnet, at 418.4, 418.9 with Sph and from 427.5-429.5 with remobilized fine dark grey qtz. Py sericite both more abundant in finer grained intervals. 428-435: Well mineralized interval of dacite with largely fracture controlled foliation parallel sulphide +/- qtz seams. ALTERATION: 7-8% streaky disseminated to banded Py. Possibly 1% combined Sp and Cp. Cp confined to fractures, Sp largely so. 4-6 fine specks of (native Au present along small discontinuous fracture at 432.75.) STRUCTURE: Foliation 65 to CA at 433.5, 55 to CA

### DIAMOND DRILL LOG

## PROPERTY: Richardson HOLE No.: NR9613

				~_										
									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	2n ppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		at 434m.												
		· · · · · · · · · · · · · · · · · · ·												
		435 to 437.1: Weakly mineralized dacite, disseminated to banded												
		sulphides. Mod. bleached. Including 8-lucm wide grey												
		qtz vein at 457.5.												
		- 437 1 to 437.2• Abrupt contact fine-med, grained 2-3%												
		sm. gtz eves above. Strongly banded with 5-7% med.												
		atz eyes below.												
		ALTERATION: Vein at, 437.5 1-2% fine Py < 1%												
		Cp, tr Asp.												
		STRUCTURE: Vein contacts foliation parallel at 50 to CA.												
		Gold mineralized fracture appears no more impressive than												
		do numerous others within interval.												
		•												
		437.1 to 440.15: Medium grained dacite, 5-7% sm. lg.												
		qtz eyes. Banded due to bleaching, narrow zones of												
		remobilized qtz rich material above 430m.												
		ALTERATION: 3-4% fine discominated by												
		STRUCTURE: Foliation 50-55 to CA. Upper contact												
		and lower contact 58 to CA, both v. sharp.												
		•												
		440.15 to 474.2: End of hole. Fine-med. grained qtz eye												
		dacite tuffs. Moderately bleached, rarely banded												

#### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9613

											ASSAY	s				
FROM	TO	LITHO	DLOGICAL DESCRIP	TION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nippm	Pt ppb	Pd ppb
		with narrow sear	ns of Py foliati	on parallel.												
		443.95 and 448.	1, 10cm wide sub	concordant qtz veins.												
		•	V fina dianamina	ted Dy as average tractily												
		ALIERATION: 3-4/	stod to boordood	over 3. En intervals a g (66 6												
		(67 7 Modestr	nated to banded	over .55m Intervals e.g. 404.0												
		407.7. Mod-Stro 442 5-445 Top	vein 2-3% tourm													
		lower vein 1% P	Venn 2 5x toonn	resentalong some												
		fractures from 4	436-456.5.	some arong some												
		•														
		STRUCTURE: Folia	ation 45-55 to C	A throughout except												
		at 467, 60 to C/	A over 1/2m.													
		DO	IN-HOLE SURVEY D	ATA												
		DEPTH	INCLINATION	BEARING												
		62.80	-72.50	356.00												
		135.98	-69.50													
		196.95	-71.00	5.50												
		257.93	-69.50	5.00												
			:	_												
		318.90	-67.00	7.00												

### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9613

											ASSAY	s				
юм то	LITH	OLOGICAL DESCRIP	TION		FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd
	DEPTH	INCLINATION	BEARING													
	379.88	-65.00	10,00													
	437.81	-64.00	12.00													
	474.20	-64.00														

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9614 Collar Eastings: -350.00 Collar Northings: -675.00 Collar Elevation: 10.00 Grid: Rich Drill contractor, Bradley Bros. Diamond drilling.

Collar Inclination: -65.00 Grid Bearing: 0.00 Final Depth: 334.00 metres Logged by C.A.Wagg Logged by: D.M.E. Date: 10/03/96-13/03/96 Down-hole Survey: Sperry Sun DDH drilled on claim Lot5,ConI, Richards

								ASSAY	5				
то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppn	Co ppm	Ni ppm	Pt ppb	Pd ppb
6.7	OVERBURDEN (OB) - Casing. Last 0.35m "H"												
	size core from dacitic bedrock.												
49.65	INT. FELSIC QTZ-FSP PORPHYRY (Int. Felsic QTZ-fsp Porph.) -	10.13	10.70	0.57	20.000	47.000	1710.000	0.200	NIL	NIL	NIL	NIL	NIL
	fine -med. grained. Dark grey-black, spotted with deep	10.70	11.90	1.20	5.000	24.000	175.000	NIL	1.000	NIL	NIL	NIL	NIL
	blue qtz eyes 1-6mm and occasionally with 1-2% lath like	14.10	14.68	0.58	25.000	119.000	2200.000	0.400	2.000	NIL	NIL	NIL	NIL
	grey and white altered fsp phenocrysts up to 2mm in	14.68	15.50	0.82	15.000	44.000	480.000	0.200	5.000	NIL	NIL	NIL	NIL
	length. Medium grey-green in places due to bleaching/	32.72	33.10	0.38	10.000	15.000	155.000	NIL	2.000	NIL	NIL	NIL	NIL
	sausseritization of groundmass fsp. Well foliated and												
	generally weakly-mod. banded due to <1cm wide												
	zones of foliation parallel shearing and												
	bleaching along abundant subconcordant fractures.												
	Perhaps, 5% combined qtz and fsp phenocrysts.												
	50-80% fine-med. dark grey feldspathic groundmass.												
	15-40% fine mafic silicates biotite > amphibole > Chl.												
	- ALTERATION: 1-3% fine disseminated Py on average. Up												
	to 3-5% over 30cm in a few places. Minor Sph within												
	narrow bleached shear adjacent to 1cm wide concordant												
	atz veinlet at 10.6m 1% Sp along fractures 5-7%												
	vein gtz as 1-2cm wide veinlets over 50cm at 14 35												
	Vesk nervasive calcite alteration throwhout												
	то 6.7 49.65	<ul> <li>ITO LITHOLOGICAL DESCRIPTION</li> <li>OVERBURDEN (OB) - Casing. Last 0.35m "H" size core from dacitic bedrock.</li> <li>49.65 INT. FELSIC QTZ-FSP PORPHYRY (Int. Felsic QTZ-fsp Porph.) - fine -med. grained. Dark grey-black, spotted with deep blue qtz eyes 1-6mm and occasionally with 1-2% Lath like grey and white altered fsp phenocrysts up to 2mm in length. Medium grey-green in places due to bleaching/ sausseritization of groundmass fsp. Well foliated and generally weakly-mod. banded due to &lt;1cm wide zones of foliation parallel shearing and bleaching along abundant subconcordant fractures. Perhaps, 5% combined qtz and fsp phenocrysts. 50-80% fine-med. dark grey feldspathic groundmass. 15-40% fine mafic silicates biotite &gt; amphibole &gt; Chl</li> <li>ALTERATION: 1-3% fine disseminated Py on average. Up to 3-5% over 30cm in a few places. Minor Sph within narrow bleached shear adjacent to 1cm wide concordant qtz veinlet at 10.6m. 1% Sp along fractures, 5-7% vein qtz as 1-2cm wide veinlets, over 50cm at 14.35 Weak pervasive calcite alteration throughout.</li> </ul>	TO       LITHOLOGICAL DESCRIPTION       FROM         6.7       OVERBURDEN (OB) - Casing. Last 0.35m "H" size core from dacitic bedrock.       10.13         49.65       INT. FELSIC QTZ-FSP PORPHYRY (Int. Felsic QTZ-fsp Porph.) -       10.13         fine -med. grained. Dark grey-black, spotted with deep       10.70         blue qtz eyes 1-6mm and occasionally with 1-2X lath like       14.10         grey and white altered fsp phenocrysts up to 2mm in       14.68         length. Medium grey-green in places due to bleaching/       32.72         sausseritization of groundmass fsp. Well foliated and generally weakly-mod. banded due to <1cm wide	TO       LITHOLOGICAL DESCRIPTION       FROM       TO         6.7       OVERBURDEN (0B) - Casing. Last 0.35m "H"       size core from dacitic bedrock.       10.13       10.70         49.65       INT. FELSIC QTZ-FSP PORPHYRY (Int. Felsic QTZ-fsp Porph.) -       10.13       10.70       11.90         blue qtz eyes 1-6mm and occasionally with 1-2% lath like       14.10       14.68       15.50         length.       Medium grey-green in places due to bleaching/       32.72       33.10         sausseritization of groundmass fsp.       Well foliated and       generally weakly-mod. banded due to <1cm wide	TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH         6.7       OVERBURDEN (OB) - Casing. Last 0.35m "H" size core from dacitic bedrock.       10.13       10.70       0.57         49.65       INT. FELSIC QTZ-FSP PORPHYRY (Int. Felsic QTZ-fsp Porph.) - fine -med. grained. Dark grey-black, spotted with deep       10.70       11.90       1.20         blue qtz eyes 1-form and occasionally with 1-2X lath like       14.10       14.68       0.58         grey and white altered fsp phenocrysts up to Zum in       14.68       15.50       0.82         length. Medium grey-green in places due to bleaching/       32.72       33.10       0.38         sausseritization of groundmass fsp. Well foliated and generally weakly-mod. banded due to <1cm wide	10       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb         6.7       OVERBURDEN (OB) - Casing. Last 0.35m "H"       size core from dacitic bedrock.       10.13       10.70       0.57       20.000         49.65       INT. FELSIC QTZ-FSP PORPHYRY (Int. Felsic QTZ-Fsp Porph.) -       10.13       10.70       0.57       20.000         fine -med. grained. Dark grey-black, spotted with deep       10.70       11.90       1.20       5.000         blue qtz eyes 1-6mm and occasionally with 1-2X lath like       14.10       14.68       0.58       25.000         grey and white altered fsp phenocrysts up to 2mm in       14.68       15.50       0.82       15.000         length. Medium grey-green in places due to bleaching/       32.72       33.10       0.38       10.000         sausseritization of groundmass fsp.       Well foliated and       generally weakly-mod, banded due to <1cm wide	TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm         6.7       OVERBURDEN (OB) - Casing. Last 0.35m "H"       size core from dacitic bedrock.       10.13       10.70       0.57       20.000       47.000         49.65       INT. FELSIC QTZ-FSP PORPHYRY (Int. Felsic QTZ-Fsp Porph.) -       10.13       10.70       0.57       20.000       47.000         fine med. grained. Dark grey-black, spotted with deep       10.70       11.90       1.20       5.000       24.000         blue qtz eyes 1-6mm and occasionally with 1-2% Lath like       14.10       14.68       0.58       25.000       119.000         grey and white altered fsp phenocrysts up to 2mm in       14.68       15.50       0.82       15.000       44.000         length. Medium grey-green in places due to bleaching/       32.72       33.10       0.38       10.000       15.000         sausseritization of groundmass fsp. Well foliated and generally weakly-mod, banded due to <1cm wide	<ul> <li>10 LITHOLOGICAL DESCRIPTION</li> <li>6.7 OVERBURDEN (OB) - Casing. Last 0.35m "H" size core from dacitic bedrock.</li> <li>49.65 INT. FELSIC 0TZ-FSP PORPHYRY (Int. Felsic 0TZ-Fsp Porph.) - fine -med. grained. Dark grey-black, spotted with deep</li> <li>10.70 11.90 1.20 5.000 47.000 1710.000</li> <li>grey and white altered fsp phenocrysts up to 2mm in</li> <li>14.68 0.58 25.000 119.000 2200.000</li> <li>length. Medium grey-green in places due to bleaching/</li> <li>sausseritization of groundmass fsp. Well foliated and generally weakly-mod, banded due to &lt;1cm wide</li> <li>zones of foliation parallel shearing and bleaching along abundant subconcordant fractures.</li> <li>Perhaps, 5% combined qtz and fsp phenocrysts.</li> <li>S0-80% fine medic silicates biotite &gt; amphibole &gt; Chl.</li> <li>.</li> <li>ALTERATION: 1-3% fine disseminated Py on average. Up to 3-5% over 30cm in a few places. Winor Sph within narrow bleached shear adjacent to 1cm wide concordant qtz veinlet at 10.6m. 1% Sp along fractures, 5-7% vein qtz as 1-2cm wide veinlets, over 50cm at 14.35</li> <li>Weak pervasive calcite atteration throughout.</li> </ul>	TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppm         6.7       OVERBURDEN (OB) - Casing. Last 0.35m "H"       size core from dacitic bedrock.       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppm         49.65       INT. FELSIC 0T2-FSP PORPHYRY (Int. Felsic 0T2-Fsp Porph.) -       10.13       10.70       0.57       20.000       47.000       1710.000       0.200         fine -med. grained. Dark grey-black, spotted with deep       10.70       11.90       1.20       5.000       24.000       175.000       NIL         blue qtz eyes 1-6mm and occasionally with 1-2% lath like       14.10       14.68       0.58       25.000       119.000       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.400       0.200       0.200       0.400       0.200       0.200       0.400       0.200       0.200       0.400       0.200       0.200       0.200       0.200       0.200       0.200       0.200       0.200       0	10       LITHOLOGICAL DESCRIPTION       ASSATS         6.7       OVERBURDEN (OB) - Casing. Last 0.35m "H" size core from dacitic bedrock.       FROM       10       WIDTH       Au pob       Cu pom       Zn pom       Ag pom       Pb pom         49.65       INT. FELSIC 0T2-FSP PORPHYRY (int. Felsic 0T2-Fsp Porph.) - fine -med. grained. Dark grey-black, spotted with deep       10.70       11.90       1.20       5.000       47.000       171.000       0.200       NIL         10.9       blu eqt 2 eyes 1-6mm and occasionally with 1-2X lath like       14.10       14.68       15.50       0.82       15.000       40.000       40.000       0.200       Source         10.9       sausseritization of groundmass fsp.       Vell foliated and generally weakly-mod. banded due to <1cm wide zones of foliation parallel shearing and bleaching along abundant subconcordant fractures.	10       LITHOLOGICAL DESCRIPTION         6.7       OVERBURDEN (OB) - Casing. Last 0.35m "H" size core from dacitic bedrock.         49.65       INT. FELSIC 0TZ-FSP PORPHYRY (Int. Felsic 0TZ-Fsp Porph.) - fine -med. grained. Dark grey-black, spotted with deep blue qtz eyes 1-6mm and occasionally with 1-2X lath like qrey and white altered fsp phenocrysts up to Zmm in length. Medium grey-green in places due to bleaching/ sausseritization of groundmass fsp. Well foliated and generally weakly-mod, banded due to <1cm wide zones of foliation parallel shearing and bleaching along abundant subconcordant fractures. Perhaps, 5% combined qtz and fsp phenocrysts. 50-80% fine-med. dark grey feldspathic groundmass. 15-40% fine mafic silicates biotite > amphibole > Chl. AltERATION: 1-3% fine disseminated Py on average. Up to 3-5% over 30cm in a few places. Minor Sph within narrow bleesched shear adjacent to 1cm wide concordant qtz veinlet at 10.6m. 1% Sp along fractures, 5-7% vein qtz as 1-2cm wide veinlets, over 50cm at 14.35 Weak pervesive calcie altereation throughout.       AssArS	10       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppn       Pb ppm       Co ppm       Ni ppm         6.7       OVERBURDEN (08) - Casing. Last 0.35m "H"       size core from dacitic bedrock.       10.13       10.70       0.57       20.000       47.000       1710.000       0.200       NiL       NIL       NIL         49.65       INT. FELSIC 4T2-FSP PORPHYRY (Int. Felsic 4T2-fsp Porph.) -       10.13       10.70       0.57       20.000       47.000       1710.000       0.200       NIL       NIL       NIL       NIL         grey and white altered fsp phenocrysts up to 2mm in       14.68       15.50       0.82       15.000       44.000       480.000       0.200       NIL       NIL       NIL         sausseritization of groundmass fsp. Well foliated and generally weakly-mod. banded due to <1cm wide zones of foliation parallel shearing and bleaching due to <1cm wide zones of foliation fsp benocrysts.	TO       LITHOLOGICAL DESCRIPTION         6.7       OVERBURDEN (OB) - Casing. Last 0.35m "H"         size core from dacitic bedrock.         49.65       INT. FELSIC GTZ-FSP PORPHYRY (Int. Felsic GTZ-Fsp Porph.) - fine med. grained. Dark grey-black, spotted with deep       10.13       10.70       0.57       20.000       47.000       1710.000       0.200       NIL       NIL

### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

									ASSAYS	 ;				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Auppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Poi ppb
		STRUCTURE: Foliation 55-60 to CA above 8m. Foliation 50 to CA from 9-12m, 55-65 to CA from 13-21m. 45-55 to CA from 21.5-31.5.												
		18.7 to 19.1: Weakly bleached medium grained qtz eye dacite tuff. Concordant contacts, but likely an inclusion.												
		ALTERATION: 2-3% fine disseminated Py.												
		31.3 to 32.81: Graded bed of qtz eye dacite tuff. Coarser grained with abundant lg. qtz eyes at lower contact.												
		STRUCTURE: Contacts foliation parallel. Top 60 to CA, lower 50 to CA. Foliation 60 to CA at 33.1 50 to CA from 34-36.75.												
		39.0 to 41.1: K-spar present as well as bleaching, adjacent to fractures.												
		ALTERATION: Mod. pervasive k-spar alteration from 39.7-40.2.												
		STRUCTURE: Foliation 60 to CA at 42m.												
		47.75: 5cm wide contorted Crosscutting qtz vein.												

#### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

									ASSAYS	5				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	70	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Plo ppm	Со ррт	Ni ppm	Pt ppb	Pd ppb
		ALTERATION: Weakly chloritized contacts, tr												
		1% Py, 2-3% fine disseminated Py.												
		- STRUCTURE: Vein averages 40 to CA, nearly												
		perpendicular to foliation.												
		45.90 to 49.65: Banded due to bleaching, resembles												
		med. grained dacite but with 5-10% smlg. blue gtz eyes.												
49.65	61.0	GID (GID, ma) - Medium grained, med. grev. 2-3% smmed.	51.50	52.30	0.80	30,000	26,000	210,000	0.300	2.000	NIL	NIL	NIL	NIL
		1-4mm, white atz eves. <5% fine mafic silicates.	53.75	54.15	0.40	190.000	79.000	2600.000	0.500	3,000	NIL	NIL	NIL	NIL
		Remainder fine grained feldspathic groundmass.	56.48	56.98	0.50	100.000	15.000	235,000	0.300	NIL	NIL	NIL	NIL	NIL
			56.98	57.33	0.35	925.000	63.000	2300,000	6,000	8,000	NIL	NIL	NIL	NIL
		ALTERATION: 2-3% fine disseminated Py.	57.33	58.71	1.38	35,000	9.000	73.000	NIL	NIL	NIL	NIL	NIL	NIL
			58.71	60.29	1.58	15,000	10.000	26,000	NIL	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: Well foliated, weakly banded due to	60.29	60.76	0.47	5,000	12.000	37.000	NIL	NIL	NIL	NIL	NIL	NIL
		1-10cm wide foliation parallel zones of bleaching.												
		51.25 to 53.6. Chloritic, mafic dyke material injected												
		along subconcordant to Crosscutting fractures Broken												
		core common throughout interval "Discrete" dvkes												
		at 51 25-51 502 Crosscutting 52 0-52 25 Crosscutting 53 30-												
		53.55.												
		ALTERATION: 3-5% fine disseminated Py within dyke material.												
		Intense chloritization of dvke, with epidote and calcite												

#### DIAMOND DRILL LOG

## PROPERTY: Ríchardson HOLE No.: NR9614

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									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		along fractures. Trace Sp at 54.0 in sheared material												
		adj, to 1cm wide subconcordant qtz stringer.												
		STRUCTURE: Foliation 45-55 to CA. Contacts 25-												
		30 to CA. 45-50 to CA.												
		COMMENTS: Whole rock analyses impractical												
		due to degree of intermixing of units, intensity of												
		alteration, and calcite fracture fillings.												
		Possibly a zone of Ultramafic-related breccia.												
		58 7. 5.7cm wide att wein expressed at to Crossewitting												
		non-parallel contacts. Trace Py.												
		•												
		ALTERATION: 36.7-37.45, 1% Sph along subconcordant												
		fractures.												
		60.5 to 61.0: Thermally metamorphased, weakly contaminated.												
		qtz eye dacite.												
		ALTERATION: Very weak pervasive k-sper +/- silica alteration												
		Strongly contaminated for 5cm above dyke contact.												
		•												
		STRUCTURE: Weakly sheared parallel to foliation and												
		contact 50-55 to CA.												

61.0 124.3 DIABASE DYKE (Diabase Dyke) - fine-med. grained. Dark

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

									ACCAV					
						•	•		ASSAT	5			<b>Db</b>	But web
FROM	10	LITHOLOGICAL DESCRIPTION	FROM	10	MIDIH	Au ppb	cu ppm	Zn ppm	Ag ppm	PD ppm	Co ppm	N1 ppm	ντ ρρο	Рарро
		grey to black. Typical diabase composition and texture.												
		Subophitic 60–70% pale grey plagioclase intergrown with												
		20-30% fine pyroxenes partly altered to, or with minor												
		amphibole, and trace, locally to 1-2%, serpentinized												
		phenocrysts.												
		ALTERATION: 1-2% fine disseminated Py, tr 1% magnetite, very												
		weakly magnetic throughout. Minor Ep-Calc-Chl +/- Py												
		sealing some fractures.												
		STRUCTURE: No foliation — Fractures appear randomly												
		oriented Ion contact subconcordent to Crosscutting irregular												
		avanages 60-65 to CA. Both contacts guite poticably												
		averages bo-of to the both contacts quite horizeably												
		chitted, as is area around inclusion.												
		100.00: Strong pervasive epidote alteration over 15-20cm.												
		•												
		ALIERATION: Weak-mod. sausseritization, k-spar												
		replacement of fsp phenocryst and epidote development.												
		•												
		122.0 to 122.45: Strongly altered inclusion of dacite.												
		Subconcordant 5cm wide barren qv at 122.35.												
		•												
		ALTERATION: 2-3% fine disseminated Py.												
		STRUCTURE: Foliation 60 to CA at top, foliation												
		40 to CA at bottom parallel to contacts.												

# DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

					_				ASSA	YS					
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
124.3	226.3	MEDCRS. GRAINED QID (QID, mg-cg) -	124.28	124.66	0.38	760.000	74.000	22,000	5.700	48.000	NIL	NIL	NIL	NIL	
		similar to interval from 49.65-61.0m, but occasionally	124.66	125.03	0.37	1230.000	138.000	2900.000	39.000	1200.000	NIL	NIL	NIL	NIL	
		coarser grained and with 5-7% generally med. sized	125.03	126.00	0.97	1490.000	139.000	4300.000	28.000	2500.000	NIL	NIL	NIL	NIL	
		2-4mm, qtz eyes.	126.00	127.01	1.01	1080.000	136.000	1600.000	6.600	342.000	NIL	NIL	NIL	NIL	
			127.01	127.57	0.56	50.000	33.000	27.000	0.700	10.000	NIL	NIL	NIL	NIL	
		ALTERATION: 3-4% fine disseminated to mm wide	131.20	131.51	0.31	1940.000	36.000	165.000	48.000	132.000	NIL	NIL	NIL	NIL	
		foliation parallel seams of Py. Moderately bleached	131.51	132.80	1.29	125.000	25.000	61.000	5.800	18.000	NIL	NIL	NIL	NIL	
		and sericitized throughout.	132.80	133.13	0.33	270.000	21.000	372.000	27.200	138.000	NIL	NIL	NIL	NIL	
			133.58	133.88	0.30	145.000	10.000	192.000	10.800	20.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Lower contact very abrupt, planar conforms	137.30	138.09	0.79	145.000	43.000	342.000	45.500	290.000	NIL	NIL	NIL	NIL	
		to foliation at 50 to CA. Well foliated at 50-55, rarely	138.09	138.75	0.66	110.000	15.000	580.000	12.600	70.000	NIL	NIL	NIL	NIL	
		to 45 or 60 degrees.	138.75	139.78	1.03	110.000	7.000	74.000	13.800	96.000	NIL	NIL	NIL	NIL	
			140.43	141.01	0.58	390.000	29.000	1400.000	100.000	480.000	NIL	NIL	NIL	NIL	
		124.3 to 125.05+: Light-med. green-brown. Fine grained	141.01	141.78	0.77	30.000	27.000	80.000	6.700	17.000	NIL	NIL	NIL	NIL	
		silicified, with considerable sericite. Tourmaline with	141.78	142.18	0.40	20.000	23.000	72.000	3.800	17.000	NIL	NIL	NIL	NIL	
		qtz +/- calcite at 127.50 Crosscutting < 5mm	142.18	143.02	0.84	85.000	24.000	120.000	10.000	29.000	NIL	NIL	NIL	NIL	
		wide fractures, and in Crosscutting 1cm wide qtz veinlets at 133.7	143.02	143.46	0.44	90.000	10.000	295.000	5.700	15.000	NIL	NIL	NIL	NIL	
		and 138.3.	143.46	144.60	1.14	90.000	30.000	115.000	7.600	23.000	NIL	NIL	NIL	NIL	
			144.60	145.00	0.40	215.000	12.000	76.000	4.500	14.000	NIL	NIL	NIL	NIL	
		ALTERATION: 8-10% fine Py, tourmaline and Py present	145.00	145.54	0.54	100.000	22.000	110.000	6.400	26.000	NIL	NIL	NIL	NIL	
		within 2-10mm wide foliation parallel qtz stringer at 124.35.	145.54	146.57	1.03	120.000	27.000	90.000	8.200	17.000	NIL	NIL	NIL	NIL	
		15% Py primarily banded over 20cm at 131.4. 138.3, tr	147.90	148.26	0.36	100.000	18.000	37.000	1.700	17.000	NIL	NIL	NIL	NIL	
		Sp, minor muscovite within qv. Commonly 4-5% fine Py	148.77	149.27	0.50	15.000	21.000	134.000	1.500	8.000	NIL	NIL	NIL	NIL	
		below 136.0 disseminated and as wispy streaks parallel	150.90	151.20	0.30	30.000	33.000	99.000	14.800	34.000	NIL	NIL	NIL	NIL	
		to foliation.	151.20	151.70	0.50	25.000	36.000	72.000	9.000	42.000	NIL	NIL	NIL	NIL	
			151.70	152.26	0.56	30.000	26.000	97.000	10.500	46.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Foliation 50-60 to CA from 135-144.75m.	152.26	153.17	0.91	80.000	12.000	75.000	27.000	40.000	NIL	NIL	NIL	NIL	

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9614

ASSAYS FROM LITHOLOGICAL DESCRIPTION TO FROM TO WIDTH Auppb Cuppm Zn pom Ag pom Pb ppm Co ppm Nipom Pt pob Pd pob Foliation 65-70 to CA from 145-150m, variable below 153.17 154.20 8.000 1.03 50.000 10.000 75,000 22.000 NIL NIL NIL NIL 150m. 154.20 154.83 0.63 50.000 7.000 63.000 8.800 NIL NIL NIL NIL 28.000 154.83 155.51 0.68 80.000 6.000 160.000 11.200 30.000 NIL NIL NIL NIL 143 to 146.5: Somewhat fragmental in appearance, 155.51 156.22 0.71 115.000 8,000 95.000 15.600 26,000 NTI NIL NIL NIL particularly below 144m. Banded on cm scale gtz-fsp 156.22 157.02 0.80 310.000 12.000 300.000 38.000 172.000 NIL NIL NIL NIL rich vs. miaceous laminae. 157.02 157.53 0.51 640.000 18.000 2900.000 60.000 880.000 NIL NIL NIL NIL 157.53 158.98 1.45 450.000 16.000 1350.000 46.500 840.000 NIL NIL NIL NIL 146.5 to 149.4; Medium grained unbanded interval with 158.98 160.30 1.32 285.000 13.000 1300,000 25.000 205.000 NIL NIL NIL NIL 12.000 700.000 only 2-3% sm.-med. size qtz eyes. Includes a contorted 160.30 161.23 0.93 170.000 134.000 NIL NIL NIL 11.400 NIL Crosscutting qtz-Calcite vein about 10cm wide, over 161.23 161.94 0.71 100.000 17.000 1400.000 7.000 85,000 NIL NIL NIL NIL 30cm core length at 148.05. 162.42 0.48 125.000 17.000 890.000 9.400 163.000 NIL NIL 161.94 NIL NIL 162.42 163.05 0.63 190.000 15.000 310.000 9.000 95.000 NIL NIL NIL NIL ALTERATION: Trace disseminated Sph present 163.55 0.50 280,000 30.000 2200.000 130.000 163.05 13.000 NIL NIL NIL NIL occasionally below 141.5. Tourmaline "common" 163.55 163.97 0.42 340.000 32,000 2200,000 15.600 220.000 NIL NIL NIL NIL within qtz stringers and as <1mm wide fillings along 163.97 164.35 0.38 345.000 28.000 2400.000 12.000 215.000 NIL NIL NIL NIL subconcordant to Crosscutting fractures. Also 164.35 164.65 0.30 3110.000 133.000 1550.000 134.000 1600.000 NIL NIL NIL NTE possibly disseminated within sections with 164.65 165.45 0.80 485.000 25.000 910.000 14.800 310,000 NIL NIL NIL NIL fragmental appearance above 157.25. 165.45 166.03 0.58 365,000 27.000 940.000 12.000 87,000 NIL NIL NTI NIL 166.03 166.50 0.47 745.000 188.000 2000.000 17.000 84.000 NIL NIL NIL NIL STRUCTURE: 45 to CA at 151, 70 to CA at 151.5, 55 to CA at 166.50 166,90 0.40 220,000 90.000 5300.000 10.800 64.000 NIL NIL NIL NIL 154, 50 to CA at 155.5, and 55 to CA at 157m. Contacts foliation 166.90 167.13 0.23 750.000 95.000 1650.000 11.000 230.000 NTL NTI NIL NIL parallel, abrupt. 167.13 167.68 0.55 7010.000 205.000 8100.000 40,000 164,000 NIL NIL NIL NIL 167.68 168,00 0.32 1080.000 189.00014700.000 40.000 230.000 NIL NIL NIL NIL COMMENTS: Some distinct lithic fragments are identifiable, 168.00 168.31 0.31 710,000 70.000 6000.000 25,000 143.000 NIL NIL NIL NIL but banding may be due in part to metamorphism/deformation 168.31 168,62 0.31 1270,000 510.00034800.000 138.000 7000.000 NIL NIL NIL NIL causing a gneissic segregation or minor partial melting. 168.62 168.78 0.16 535,000 60,000 2600,000 23.000 179.000 NIL NIL NIL NIL Tourmaline constitutes up to 1% of rock on average from 169.20 29.000 410.000 168.78 0.42 465.000 12.600 71.000 NIL NIL NIL NIL 141.5-157.25. 169.20 169.70 0.50 660.000 20.000 370.000 11.400 30.000 NIL NIL NIL NIL

# DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Nippm	Pt ppb	Pol ppb
			169.70	170.43	0.73	620.000	25.000	510.000	15.400	73.000	NIL	NIL	NIL	NIL
		149.4 to 159.1: Coarse qtz eye dacite with :abundant"	170.43	170.71	0.28	380.000	34.000	3000.000	17.600	100.000	NIL	NIL	NIL	NIL
		dacitic lithic fragments, partially resorbed and flattened	170.71	171.51	0.80	280.000	8.000	52.000	13.600	59.000	NIL	NIL	NIL	NIL
		<pre>2:1 to &gt;10:1, typically &lt; 1cm in present thickness,</pre>	171.51	171.92	0.41	440.000	10.000	430.000	34.000	20.000	NIL	NIL	NIL	NIL
		constitutiong 20-30% of rock. 5-10% sm. qtz eyes.	171.92	172.10	0.18	740.000	13.000	560.000	60.000	46.000	NIL	NIL	NIL	NIL
			172.10	172.77	0.67	10.000	5.000	21.000	0.400	NIL	NIL	NIL	NIL	NIL
		ALTERATION: Mod-strongly bleached, sericitized.	172.77	172.89	0.12	15.000	2.000	43.000	6.000	NIL	NIL	NIL	NIL	NIL
		5-7% disseminated Py, most as streaks or very narrow seams.	172.89	173.13	0.24	10.000	8.000	16.000	1.800	NIL	NIL	NIL	NIL	NIL
		Strongly bleached below 149. Breccia like fracture	173.13	173.62	0.49	5.000	7.000	39.000	NIL	NIL	NIL	NIL	NIL	NIL
		fillings of Py over 30cm at 155.9.	173.62	174.18	0.56	5.000	18.000	95.000	2.000	NIL	NIL	NIL	NIL	NIL
			174.18	174.45	0.27	10.000	4.000	17.000	NIL	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: Weakly-mod. banded with lithic fragments.	174.45	178.90	4.45	5.000	10.000	15.000	0.200	NIL	NIL	NIL	NIL	NIL
		Minor variation in degree of bleaching. Moderately	181.80	182.28	0.48	5.000	9.000	9.000	0.200	NIL	NIL	NIL	NIL	NIL
		foliated at 60-75 to CA. Mod. fractured, subconcordant	185.55	186.18	0.63	5.000	9.000	5.000	NIL	NIL	NIL	NIL	NIL	NIL
		to high angle to foliation commonly with hairline fillings	189.81	190.45	0.64	5.000	10.000	17.000	NIL	NIL	NIL	NIL	NIL	NIL
		of fine brown-black tourmaline.	191.85	192.72	0.87	10.000	12.000	7.000	0.200	NIL	NIL	NIL	NIL	NIL
			201.35	202.08	0.73	NIL	9.000	11.000	NIL	NIL	NIL	NIL	NIL	NIL
		COMMENTS: Small bomb size fragment 10cm x 2-5cm	202.90	203.45	0.55	20.000	6.000	22.000	NIL	NIL	NIL	NIL	NIL	NIL
		on core face at 154.15. Muscovite with qtz "pod" 1-2cm	203.45	204.02	0.57	210.000	19.000	135.000	3.300	32.000	NIL	NIL	NIL	NIL
		wide at 157.6.	205.87	206.80	0.93	135.000	15.000	60.000	1.300	54.000	NIL	NIL	NIL	NIL
			206.80	207.50	0.70	95.000	10.000	42.000	0.600	29.000	NIL	NIL	NIL	NIL
		159.1 to 163: Banding, strong flattening of fragments	207.50	207.95	0.45	130.000	9.000	96.000	1.300	50.000	NIL	NIL	NIL	NIL
		absent. Fragments relatively undeformed and unaltered	207.95	208.51	0.56	285.000	14.000	290.000	1.800	168.000	NIL	NIL	NIL	NIL
		30-40% of rock volume, poorly sorted. 3-4% smlg. qtz	208.51	209.00	0.49	385.000	20.000	560.000	2.900	290.000	NIL	NIL	NIL	NIL
		eyes.	209.00	210.05	1.05	710.000	17.000	470.000	1.600	200.000	NIL	NIL	NIL	NIL
			210.05	210.55	0.50	225.000	68.000	550,000	2.400	290.000	NIL	NIL	NIL	NIL
		ALTERATION: Trace 1% disseminated Sph throughout below	210.55	211.09	0.54	390.000	56.000	3250.000	3.800	600.000	NIL	NIL	NIL	NIL
		160m with 3-4% disseminated Py. About 1% Sph on average	211.09	211.55	0.46	215.000	74.000	1450.000	4.600	530.000	NIL	NIL	NIL	NIL

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9614

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FROM TO LITHOLOGICAL DESCRIPTION

between 162.3 and 166.4 with about 5% disseminated Py.

163 to 208.75: similar to interval from 149.4-159.1, but 3-4% sm. qtz eyes. 164.35, 12cm wide qtz vein strongly foliated, banded. 166.4-170.8, well mineralized interval with Sp. Fragments commonly barely discernible due to bleaching. Includes 10cm thick bed of fine dacite tuff at 168.2. Transition at 170.8 to small, well flattened banded fragments <5mm thick Qtz eyes rare to absent above 192m. Below 192, bands/fragments commonly 1-2cm fine disseminated Py.

ALTERATION: Vein 1-2% fine Py, <1% Sp <1% Gn, minor calcite, tr muscovite. 166.4-170.8, 2-3% Sp on average up to 7-8% over 10-30cm, as small disseminated clusters with Py and along discontinuous gash-like fractures parallel to foliation. Below 170.8, mod. bleached strongly sericitized, tr 1% fine Py.

198.3 to 189.7: Concordant, fine grained gabbroic dyke, strongly calcite altered chloritized, moderately foliated. Similar to 10cm wide dykes, concordant, at 196.35, 197.0.

ALTERATION: tr disseminated Asp present above 173.5 with thin bands of coarse disseminated Asp at 172.8, 173 and 7-8% Asp over 10cm above a cm wide sericite rich fault zone.

				ASSAYS				
FROM	TO	WIDTH Au ppb	Cuppra Znppra	Ag ppm Pb ppm	Со ррп	Nippm	Pt ppb	Pd ppb
211.55	213.21	1.66 130.000	31.000 730.000	2.000 430.000	NIL	NIL	NIL	NIL
213.21	213.47	0.2614530.000	310.000 7300.000	34,000 8700.000	NIL	NIL	NIL	NIL
213.47	214.04	0.57 765.000	52.000 1400.000	3.800 1000.000	NIL	NIL	NIL	NIL
214.04	214.46	0.42 490.000	21.000 680.000	1.200 355.000	NIL	NIL	NIL	NIL
214.46	214.73	0.27 2540.000	395.00034700.000	23.200 5200.000	NIL	NIL	NIL	NIL
214.73	215.58	0.85 100.000	41.000 750.000	2.000 640.000	NIL	NIL	NIL	NIL
215.58	216.46	0.88 295.000	24.000 1700.000	0.600 114.000	NIL	NIL	NIL	NIL
216.46	217.91	1.45 255.000	92.000 1000.000	3.000 40.000	NIL	NIL	NIL	NIL
217.91	219.21	1.30 245.000	58.000 830.000	1.700 122.000	NIL	NIL	NIL	NIL
219.21	219.80	0.59 205.000	25.000 335.000	1.500 212.000	NIL	NIL	NIL	NIL
219.80	220.12	0.32 1700.000	580.00010000.000	28.000 5000.000	NIL	NIL	NIL	NIL
220.12	220.75	0.63 275.000	93.000 2900.000	10.000 1250.000	NIL	NIL	NIL	NIL
220.75	221.85	1.10 120.000	24.000 168.000	0.800 105.000	NIL	NIL	NIL	NIL
221.85	222.78	0.93 790.000	84.000 3500.000	3.000 133.000	NIL	NIL	NIL	NIL
222.78	223.49	0.71 2130.000	630.00010000.000	10.600 205.000	NIL	NIL	NIL	NIL
223.49	223.92	0.43 3520.000	620.00010000.000	50.000 830.000	NIL	NIL	NIL	NIL
223.92	224.30	0.38 630.000	100.000 1750.000	6.000 113.000	NIL	NIL	NIL	NIL
224.30	224.77	0.47 390.000	150.000 4500.000	4.400 85.000	NIL	NIL	NIL	NIL
224.77	225.43	0.66 165.000	76.000 510.000	4.000 72.000	NIL	NIL	NIL	NIL
225.43	225.78	0.35 230.000	50.000 225.000	2.400 93.000	NIL	NIL	NIL	NIL

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## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

									ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION STRUCTURE: Foliation dyke contacts 55-60 to CA. Foliation variable from 55-70 to CA.	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nî ppm	Ptppb	Pd ppb	
		208.75 to 228.5: Medcoarse qtz eye dacite tuff. 2-4% smlg. qtz eyes, no banding. Probably in part fragmental below 218.2, definitely fragmental below 220.75. Well mineralized with Py, minor Sp below, 222.8 mostly as seams or along fractures.													
		ALTERATION: Sp, Py +/- tr Gn, Cp seams along foliation parallel fractures at: 210.4, 210.7 both 4cm wide, 2-3cm wide at 214.5. 5% Sp 2-3% Py 1% Gn, tr Cp Asp over 30-35cm-219.6595. 222.8-226.3, 5-7% disseminated to banded Py < 1% Sp unaltered, tr Py Mt.													
		STRUCTURE: Foliation 55-70 throughout remainder of hole, generally between 60-65 to CA.													
226.3	228.5	DIABASE DYKE (Diabase Dyke) - similar to interval from 61.0-124.3.	225.78	226.43	0.65	475.000	141.000	840.000	3.200	210.000	NIL	NIL	NIL	NIL	
		STRUCTURE: Irregular top contact av. 15-25 to CA. Lower contact and foliation 65 to CA.													
228.5	236.35	COARSE QID (QID, cg) - similar to interval from	228.46	228.99	0.53	645.000	88.000	56.000	5.400	21.000	NIL	NIL	NIL	NIL	

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9614

ASSAYS FROM TO LITHOLOGICAL DESCRIPTION FROM TO WIDTH Au ppb Cuppm Znppm Agippm Pb ppm Соррл Nîppro Pt ppb Pd ppb NIL 208.75-218.2, banded in places likely fragmental in part. 228.99 229,60 0.61 355.000 92,000 117,000 2.400 10.000 NIL NIL NIL 229.60 230.40 0.80 350.000 80.000 43.000 2.200 8.000 NIL NIL NIL NIL 230.40 231.02 2.800 NIL NIL NTL NIL ALTERATION: 3-5% disseminated to banded Py locally to 0.62 470.000 138.000 2000.000 10.000 10% over 30cm e.g. 235-235.3, excluding narrow dykes. 232.02 233.40 1.38 380.000 152.000 4600.000 5.200 150.000 NIL NIL NIL NIL NIL 233.40 234.30 4.000 NIL NIL NIL 0.90 385.000 133.000 5100.000 46.000 49.000 2000.000 2.800 143.000 NIL NIL NIL NIL 231.05 to 232, 235.9 to 235.25: Diabase dykes with hornfelsed 234.30 234.93 0.63 235.000 235.23 530.000 NIL NIL NIL NIL dacite for 10-15cm at either contact. 234.93 0.30 565.000 220.00010000.000 5.000 NIL NIL 235.23 235.75 0.52 630.000 88.000 5200.000 4.000 230.000 NIL NIL ALTERATION: tr Py, Mt unaltered. 235.75 236.02 0.27 445.000 115.000 2800.000 2.400 104.000 NIL NIL NIL NIL 236.02 236.35 0.33 345.000 68.000 510.000 49.000 NIL NIL NIL NTL 1.400 STRUCTURE: No foliation Crosscutting irregular top contacts concordant to subconcordant lower contacts, sharp. Foliation at 236.35 65 to CA. 236.0 237.3 QID CRYSTAL (QID, fg-mg) - fine-med. grained, 1-2% 236.35 237.00 0.65 490.000 37.000 5480.000 1.000 81.000 NIL NIL NIL NIL sm. qtz eyes. ALTERATION: 2-3% fine garnet on average. 3-5% fine disseminated to fracture controlled banded Py. Trace to 4% Sph with Py along <5mm fractures. Fractures calcite filled, tr Chl. Wallrock bleached for 4cm <5mm, replaced by fine Py, Po. STRUCTURE: Foliation 70 to CA. 237.3 238.12 DIABASE DYKE (Diabase Dyke) - medium grey-green 237.00 237.52 0.52 460.000 85.000 2400.000 1.000 29.000 NIL NIL NIL NIL

### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION weakly bleached for <1cm at contacts and along a few randomly oriented fractures. Includes	FROM	TÔ	WIDTH	Au ppb	Cu ppm	Zn ppmi	Ag ppm	РЬ ррт	Co ppm	Ni ppm	Pt ppb	Pd ppb
		wedge of qtz at lower contact. Similar to interval from 237.3. Similar to interval from 226.3-228.5.												
		ALTERATION: <1% Py overall, with 1-2% overall fine Py.												
		STRUCTURE: Top contact over 45cm from 237.1-237.55, almost perpendicular to foliation 10-15 to CA, Lower contact subconcerdant approx. 45 to CA, foliation 70.												
		238.12: QID CRYSTAL (QID, fg-mg) - 238.4-238.56, irregular walled somewhat brecciated diabase dyke.												
		ALTERATION: Well mineralized above 244.4:7-8% disseminated to banded Py along foliation parallel to Crosscutting fractures. Up to 1% Sob on average but locally to 2-3% over 30cm												
•		intervals. Restricted to patches, pyrite rich fractures.												
		STRUCTURE: Both contacts Crosscutting. Foliation contacts at 60-65 to CA.												
		240.48 to 241.73+: Diabase dyke, fine grained, no alteration or mineralization with foliation parallel contacts.												
		Entire interval brecciated to some degree. Anastomosing shear?, resulting in a somewhat fragmental appearance. mm thick micaceous shear planes subparallel to foliation												

#### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

		***************************************													
			ASSAYS												
FROM	TO	LITHOLOGICAL DESCRIPTION separate <.5-1cm thick lozenges/lenses of unsheared dacite.	FROM	то	WIDTH	Au ppb	Cuppmi	Zn ppm	Ag ppm	Pb ppm	Coppra	Nippm	Pt ppb	Pd ppb	
		ALTERATION: Below 244.4, 2-4% disseminated to 4mm fracture controlled pyrite seams. Trace Sph locally along fractures, above 246.75. 2-3% fine grained garnet present throughout inside from the dykes, from 236.5-263.5, tr 1% Gnt above 265m. Trace Cp at 255.0, within interconnected fracture system, Py >> Sp, fractures to .5cm wide. From 260-263.25, approx. 1% Sp, mostly from pyrite rich fractures, some crosscutting. Some 1-2mm, wide rarely to 2cm with, tr Cp. Trace 1% Sp above 264.1. Below 264.1, 3-4% fine disseminated wide fracture controlled Py seams. STRUCTURE: Foliation 50-60 to CA from 236-237. Fractures concordant.													
		Below 273.4, core broken, parallel to CA, along a kink in foliation.													
		ALTERATION: Groundmass fsp strongly altered to clays around fault.													
		STRUCTURE: Foliation 65-70 to CA at 272.4, 40 to CA at													

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

EDOM	70		EDOM	70		Au nah		70.000	ASSAY	Din nom	Co. 000	Ninom	Dt oph	Dd oob
FROM	10	273.1 - 60-65 to CA at 273.75 Foliation 55-60 to CA at 274.5	FROM	10	WIDIN	Nu ppo	cu ppm	zn ppu	va bhu	го рра	co ppu	ni ppu	е рро	Pa ppo
		progressing to 70 to CA, from 276-281.5.												
		· · · · · · · · · · · · · · · · · · ·												
		273.85 to 282.35; Below broken zone med. grained crystal												
		tuff with 2-3% smmed. size qtz eyes. Very weakly banded.												
		ALTERATION: 1-3% fine disseminated Py. Very												
		weakly bleached rare sericite slips along foliation planes.												
		•												
		282.35: CA parallel qtz stringer 1cm wide by 25-30cm long.												
		ALTERATION: 2-78 fine Dynamical amount of discominated												
		ALTERATION: 2-34 TIME Py, STUTIAL AUDURE OF DISSeminated												
		- 284.2 to 288.35: Banded due to sericitized zones several. mm												
		to several. cm wide, narrow foliation parallel pyrite seams,												
		<, 1mm wide, and occasional calcite rich												
		subconcordant veinlets.												
		•												
		ALTERATION: 1-2% fine garnet present over 1-2m,												
		beginning at 284m. 3-5% disseminated to banded Py.												
		STRUCTURE: FOLHATION 50-65 TO CA.												
		- 288 35 to 289 0- Broken to shattered similar to interval												
		from 272.5-273.85, minor foliation parallel fault gouge												
		Qtz stringers with abundant +10%, muscovite. <5mm												
		wide, CA parallel. Over 60cm at 239.5, and over 10cm												

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

			·												
					ASSAYS										
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Coppra	Nîppm	Pt ppb	Pd ppb	
		at 300.2.													
													·		
		BELOW 289.0: Similar to interval from 284.2-288.35, but													
		with very little sericite, weakly banded.													
		ALTERATION: Minor Sp, tr Gn along <1cm wide qtz													
		stringers. Wallrock mod-strongly bleached and													
		sericitized, below 302.75.													
		STRUCTURE: Foliation parallel fracture at 300.3m.													
		•													
		302.75 to 306.45: Identifiable distinct flow, 5-7% med.													
		sized qtz veins.													
		•													
		STRUCTURE: Both contacts foliation parallel.													
		306.45 to 308.74: Fine-med. grained Crystal tuff. 2-3%													
		generally sm. qtz eyes.													
		ALTERATION: 1-3% fine disseminated garnet throughout													
		3-4% fine disseminated Py.													
		STRUCTURE: Foliation 65-70 to CA. Lower contact													
		offset along a minor fracture.													
		308.74 to 334.0: End of hole, medcoarse. grained dacite													
		qtz eye Crystal tuff. Banded, due to 1-5mm wide													
		miaceous shear planes, and bleaching over cm-10cm													

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9614

		ASSAYS 10 LITHOLOGICAL DESCRIPTION CO. DOM: N. DOM: P.C. DOM: TO VINTH ALL DOM: CU. DOM: AD DOM: DO DOM: N. DOM: P.C. DOM: P.C. DOM: D. DOM: D															
FROM	TO	LITHOL	OGICAL DESCRIPT	TION		FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		long intervals.	Streaked with r	narrow-generally <1cm	1												
		patches of qtz-ma	fic silicate-ga	arnet rich material.													
		Occasional lithic	fragments pres	sent below about													
		329m, some to 2 x	4cm resembling	g fsp megacrysts.													
		Groundmass often (	pinkish hued du	ue to abundant													
		fine garnet.															
		ALTERATION: Strong	gly bleached ir	n places.													
		Moderately serici															
		present throughou	t. Banded frac	ture-controlled													
		sulphides present	above 311m. 3	308.74-311.0:													
		5-7% Py < 1% Sp, 1	both disseminat	ted to													
		banded. Trace Spl	h present above	2 317.2. Below													
		311.0, 3-4% fine (	disseminated Py	/, weak sericite comm	ion												
		fine-very fine ga	rnet up to 5%?	in places.													
		•															
		STRUCTURE: Foliat	ion variable fr	rom 60-75 to CA													
		above 316. Folia	tion below 316.	.0m 65-75 to CA,													
		averaging 70. Fo	liation at 334m	n, 75-80 to CA.													
		DOWN	- HOLE SURVEY DA														
		DEPTH INCLINATION BEARING															
		53.66	-64 00	1.00													
			01.00														
		114.63	-63.00	5.00													

## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9614

					 											_
				 						ASSAY	s					
m to	LITHOLOGICAL DESCRIPT		TION	ION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nîppm	Pt ppb	
	DEPTH	INCLINATION	BEARING													
	175.61	-60.00	3.00													
	236.35	-55.50	5.00													
	334.00	-53.50	7.00													

Nuinsco Resources Limited DIAMOND DRILL LOG PROPERTY: Richardson HOLE No.: NR9615 Collar Inclination: -55.00 Collar Eastings: -1600.00Logged by: C.A. Wagg Collar Northings: Date: 12/03/96-15/03/96 -475.00 Grid Bearing: 0.00 Final Depth: 191.11 metres Collar Elevation: Down-hole Survey: Sperry Sun 0.00 Grid: Rich DDH drilled on claim Lot6, ConI, Richardson Twp.Drill contractor, Ultra Mobile Diam \_\_\_\_\_ ASSAYS LITHOLOGICAL DESCRIPTION FROM то WIDTH Auppeb Cupper Znipper Agipper Polpper Copper Nipper Ptippeb Polppeb FROM TO 0 41.55 OVERBURDEN (OB) - Casing. 41.55 44.8 QID (QID, mg) - medium grained, white, due in part to 44.25 44.80 0.55 25.000 45.000 87.000 NIL NIL NIL NIL NIL NIL bleaching and weathering. 5-10% 1-4mm gtz eyes. 70-80% groundmass composed primarily of < 1mm, albitized? white fsp crystals. and qtz. 2-3% fine amph, < Chi. Weil foliated, moderately fractured.</pre> Core recovery 25-30%. ALTERATION: 3-4% fine Py and Asp, tr black tourmaline disseminated throughout interval. Intensely bleached but no significant sericite; or calcite, except along late fractures. Apparently deeply weathered with feldspar altering to clay minerals. STRUCTURE: Foliation approx. 55 to CA. COMMENTS: Very soft, crumbly in places and easily scratched with a fingernail. 44.5 to 44.8: Shattered to brecciated, possibly sheared as well. Chloritic material resealing fractures, and occurring as lenses to 1 x 3mm.

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

FROM		LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au pob	Cupom	Zn pom	ASSAY:	S Pb pom	Coppm	Nipom	Pt ppb	Pd ppb	
						···· FF-			• • •						
		ALTERATION: 10-15% Chlorite, 7-8% sulphides.													
		Py < Asp. Asp rarely to 2 x 4mm crystals along fractures.													
		STRUCTURE: Contact foliation parallel at 55-60 to CA.													
44.8	66.55	FINE MAFIC VOLCANICS ( Naf. Vol. fa) - fine	44.80	45.18	0.38	220.000	405.000	117.000	0.200	NIL	NIL	NIL	NIL	NIL	
		grained, medium green. Top 3m, 25% core recovery.	45.18	47.90	2.72	65.000	188.000	108.000	NIL	NIL	NIL	NIL	NIL	NIL	
		Essentially chlorite with minor, 5%?, sericite at top of	54.48	55.78	1.30	40.000	18.000	145.000	1.600	58.000	NIL	NIL	NIL	NIL	
		interval. Transitional at around 47.85 to subequal	63.68	63.98	0.30	335.000	1350.000	56.000	0.300	NIL	NIL	NIL	NIL	NIL	
		chlorite-sericite, with minor epidote, tr sausserite.	65.74	66.54	0.80	45.000	109.000	62.000	NIL	NIL	NIL	NIL	NIL	NIL	
		ALTERATION: 2-3% fine disseminated Py. Intense chloritization some sericite.													
		•													
		STRUCTURE: Foliation variable from 45-55 to CA at 45m to 65 to CA at 45m													
		•													
		COMMENTS: S2 fabric developed running almost parallel													
		to CA. Broken and ground core common above 52.5m.													
		Below 53.30: Very fine grained serpentine minerals													
		constitute the bulk, 75-004 +, of the rock. Unusual													
		varioles in several places between 52.5 and 56.5m.													
		ALTERATION: Trace 1% Py. Strong serpentinization +/-													
### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

									ASSAY	 3				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		chlorite.												
		Sixulluk: Foliation weak, overplinted to large extent												
		by the growth of alteration products. Follation 45-70												
		COMMENTS: Altered subhedral plagioclase? considerably												
		harder than chloritic, and serpentine rich groundmass.												
		•												
		Below 54.0: Intergrown fibrous serpentime occurs as fine												
		needles, occasionally as radiating clusters. Presumably												
		an altered komatite. Probable contact at 63.90, below												
		which rock resembles an altered, fine grained, low fsp												
		gabbro, similar to the interval from 47.85-53.3, but with												
		some <10%? serpentine. 45cm of mud and sand, no core,												
		at 58.0m. Brief intervals of tuff breccia, dacite porphyry												
		with several varieties mafic lithic fragments, up to several												
		cm in diameter, over 20-30cm at 62.2, 62.5, 66.05.												
		·												
		ALLERATION: Moderately to strongly fractured with												
		often resealing fracturesCh-En-Mt-Py over 20cm core length												
		2-3% fine disseminated Pv												
		STRUCTURE: Contact orientation obscured by alteration												
		and minor movement. Foliation at 62.25, 65-70												
		to CA. Contacts broken, often offset. Lower contact												
		at 62.5 at 60 to CA, crosscutting foliation 65 to CA.												

#### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

									ASSAY	5					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
		·													
		COMMENTS: 57.60-58.5, core broken to ground.													
66.55	88.75	COARSE DACITE PORPHYRY (Crs. Dacite Porph.) -	66.54	67.50	0.96	50.000	151.000	33.000	NIL	NIL	NIL	NIL	NIL	NIL	
		coarse grained, white-pale grey, with abundant white fsp	67.50	68.72	1.22	50.000	109.000	30.000	NIL	NIL	NIL	NIL	NIL	NIL	
		phenocrysts. Appears likely to be intrusive. 7-10% medlg.	68.72	69.77	1.05	45.000	85.000	42.000	NIL	NIL	NIL	NIL	NIL	NIL	
		qtz eyes up to 4-5mm in diameter. 60-70% subhedral white,	72.24	73.04	0.80	55.000	42.000	70.000	NIL	NIL	NIL	NIL	NIL	NIL	
		albitized?, fsp phenocrysts up to 5-7mm in diameter. <20%	78.33	79.05	0.72	45,000	121.000	35.000	NIL	NIL	NIL	NIL	NIL	NIL	
		fine matrix grey-white depending on the degree of bleaching.	79.05	79.77	0.72	35,000	68.000	39.000	NIL	1.000	NIL	NIL	NIL	NIL	
		5% fine mafic silicates, primarily chlorite.	81.38	81.98	0.60	65,000	160.000	92.000	NIL	NIL	NIL	NIL	NIL	NIL	
		•	81.98	82.63	0.65	75.000	200.000	33.000	NIL	NIL	NIL	NIL	NIL	NIL	
		ALTERATION: 3-4% fine disseminated Py. 77-81, chlorite sulphide	82.63	82.98	0.35	75.000	145.000	33.000	NIL	1.000	NIL	NIL	NIL	NIL	
		and brown, dolomitic?, carbonate resealing	82.98	83.50	0.52	210.000	116.000	33.000	0.200	NIL	NIL	NIL	NIL	NIL	
		fractures. 4-5 % fine Py. Bleaching mod-intense, due in	84.45	85.05	0.60	60,000	50,000	31.000	NIL	NIL	NIL	NIL	NIL	NIL	
		part in places to weathering of fsp to clay minerals	85.05	85.83	0.78	85.000	130.000	31.000	NIL	NIL	NIL	NIL	NIL	NIL	
		particularly from 81.75-88.75.	87.47	88.00	0.53	40.000	45.000	36.000	NIL	2.000	NIL	NIL	NIL	NIL	
		· ·	88.00	88.43	0.43	60.000	57.000	43.000	0.200	NIL	NIL	NIL	NIL	NIL	
		STRUCTURE: Strongly fractured to brecciated particularly													
		from 77-81m. Well foliated 45-60 to CA above 68m. 60-													
		70 to CA below 75m.													
		•													
		COMMENTS: Core commonly broken from 66.45-69.0.													
		72.25 to 73.30: 2-3cm wide gtz vein at very low angle to CA.													
		ALTERATION: Trace 1% Py.													

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pol ppb
		STRUCTURE: Foliation 50 to CA at 73m.												
		- 81.75 to 88.75: Soft, intensely bleached, rotten due to weathering,												
		anoxic hydration. Below 82m core friable, plasticine-like												
		due to white clay content. Approximately 2m of core ground												
		0% recovery from 82.5-84.5, also from 86.0-87.5.												
		- ALTERATION: 4-5% fine disseminated Py and Asp. Py > Asp.												
		7-10% Py and Asp below 82.5, locally to 10-12%.												
		STRUCTURE: Foliation 60-70 to CA from 75-82.5m.												
		Below 82.5 foliation only apparent at 86.0, and 87.5m												
		at 70 to CA.												
		COMMENTS: Likely a fault zone, but no shearing or												
		brecciation is evident within core. No calcite present.												
88.75	98.46	FINE MAFIC VOLCANICS ( Maf. Vol. fg) - fine	88.43	90.96	2.53	590.000	438.000	99.000	0.900	NIL	NIL	NIL	NIL	NIL
		grained. Medium-dark green. Well foliated. Consists	90.96	91.96	1.00	260.000	272.000	76.000	0.500	23.000	NIL	NIL	NIL	WIL
		primarily, 60-70%, of fine chlorite, some talc? and very	96.40	98.11	1.71	240.000	520.000	126.000	0.600	NIL	NIL	NIL	NIL	NIL
		minor qtz, all very fine grained.												
		fine-med grained by above 02m and below 98m												
		Intervening rock 1-2% Pv most from occasional small												
		lenses, 1-2cm x .5cm, of Pv-"coarse" Chl-and minor gtz												
		foliation parallel.												

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

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									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		STRUCTURE: Foliation 70-80 to CA from 88.75-97m.												
		Foliation 65 to CA at 98m. Upper contact appears												
		concordant. Lower contact broken, may be crosscutting.												
		•												
		90.96 to 91.16: Short interval of fine qtz eye dacite tuff												
		altered to clay rich mush.												
		-												
		ALIERATION: 10-15% fine Py. Strongly bleached, weakly-												
		indueratery sericitized.												
98.46	102.37	FINE QID (QID fg) - fine grained. Creamy white. Well	98.11	98.54	0.43	1360.000	2600.000	140.000	2.700	NIL	NIL	NIL	NIL	NIL
		foliated, with disseminated to thinly banded Py along	98.54	99.40	0.86	125.000	49.000	40.000	0.300	NIL	NIL	NIL	NIL	NIL
		foliation parallel and rare subconcordant fractures. < 1%	99.40	100.79	1.39	80.000	36.000	23.000	0.200	NIL	NIL	NIL	NIL	NIL
		medlg. qtz eyes.	100.79	102.09	1.30	80.000	34.000	43.000	0.300	NIL	NIL	NIL	NIL	NIL
		ALTERATION: 7-10% Py, most finely disseminated,												
		some banded over about 20cm at 99.1, 100.5 and 102m.												
		Trace fine tourmaline present in places within groundmass.												
		•												
		STRUCTURE: FOLTATION VARIABLE OS AL 994, 50-70 to CA												
		from 99.4-102m. Follation 55-60 at tower contact.												
102.37	114.45	MEDCRS. QID (MedCRS QID) - medium grained.	102.09	103.28	1.19	110.000	76.000	23.000	0.200	NIL	NIL	NIL	NIL	NIL
		Creamy white-pale grey, with abundant 10-15% medlg. qtz	105.40	106.05	0.65	105.000	61.000	18.000	0.400	NIL	NIL	NIL	NIL	NIL
		eyes, commonly to 5mm in diameter. Fine white fsp crystals	107.70	108.58	0.88	180.000	128.000	25.000	0.200	NIL	NIL	NIL	NIL	NIL
		frequently visible within groundmass, and from 111.8-114												

### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nippm	Pt ppb	Pd ppb
		rock consists of 50-70% > 1mm, occasionally to 3mm,												
		fsp "phenocrysts".												
		ALTERATION: 1-2% fine disseminated Py. Moderately												
		bleached, strongest at top contact. Trace fine tourmaline												
		in places.												
		- STRUCTURE: Foliation 60-70 to CA above 107 5m												
		Foliation 70-80 to ra below 107.5												
		107.7 to 108.55: Similar to interval from 98.46-102.37.												
		1-2% small qtz eyes.												
		ALTERATION: 3-5% disseminated Py locally to 5-7%.												
		STRUCTURE: Foliation 75 to CA throughout.												
114.45	171.60	FINE-MED. QID (QID, fg-mg) - fine-med. grained	111.05	114.90	3.85	70.000	26.000	36.000	0.300	NIL	NIL	NIL	NIL	NIL
		Pale grey. 2-4% generally small qtz eyes. Banded on a	117.95	118.56	0.61	75.000	29.000	355.000	0.500	NIL	NIL	NIL	NIL	NIL
		cm scale due to narrow << 1mm Chl +/- Ser, and/or,	121.43	122.18	0.75	15.000	23.000	50.000	0.200	NIL	NIL	NIL	NIL	NIL
		Py along foliation parallel slips and fractures.	122.18	123.53	1.35	5.000	10.000	47.000	0.200	NIL	NIL	NIL	NIL	NIL
			123.53	124.45	0.92	5.000	11.000	45.000	0.200	NIL	NIL	NIL	NIL	NIL
		ALTERATION: Weakly bleached. Weakly-moderately	124.45	125.02	0.57	NIL	3.000	41.000	NIL	NIL	NIL	NIL	NIL	NIL
		sericitized. 1-2% fine disseminated Py on average.	125.02	125.41	0.39	25.000	3.000	25.000	0.300	NIL	NIL	NIL	NIL	NIL
			125.41	125.88	0.47	30.000	2.000	36.000	0.400	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 70-75 to CA, rarely to 80.	125.88	126.38	0.50	30.000	7.000	42.000	0.600	NIL	NIL	NIL	NIL	NIL
			126.38	127.10	0.72	30.000	5.000	40.000	0.500	NIL	NIL	NIL	NIL	NIL
		121.00 to 128.00: Fine crystal tuff < 1%, smlg. qtz eyes.	127.10	127.90	0.80	30.000	6.000	45.000	0.600	NIL	NIL	NIL	NIL	NIL

### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

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									ASSAY	5				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		Banded on cm scale solely due to 1-2mm wide foliation	129.50	130.70	1.20	10.000	10.000	140.000	0.400	NIL	NIL	NIL	NIL	NIL
		parallel to subconcordant fracture controlled Py seams.	132.05	132.75	0.70	45.000	13.000	68.000	0.700	NIL	NIL	NIL	NIL	NIL
			132.75	133.30	0.55	350.000	14.000	80.000	0.700	NIL	NIL	NIL	NIL	NIL
		ALTERATION: Weak-moderate bleaching/sericite. 5-7%	135.70	136.70	1.00	1770.000	10.000	35.000	1.600	NIL	NIL	NIL	NIL	NIL
		narrow bands of disseminated Py.	136.70	137.65	0.95	20.000	14.000	112.000	0.200	NIL	NIL	NIL	NIL	NIL
			137.65	138.42	0.77	40.000	30.000	63.000	0.500	6.000	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 65-80 to CA. Average 70-75.	138.42	139.01	0.59	60.000	18.000	85.000	0.600	6.000	NIL	NIL	NIL	NIL
			139.29	139.92	0.63	850.000	14.000	102.000	0.700	9.000	NIL	NIL	NIL	NIL
		125.2: 3-5cm wide qtz vein.	140.27	140.53	0.26	1360.000	138.000	135.000	2.100	17.000	NIL	NIL	NIL	NIL
			140.79	141.42	0.63	70.000	20.000	90.000	0.500	4.000	NIL	NIL	NIL	NIL
		ALTERATION: < 1% Py, trace Cp, and minor calcite.	148.71	148.90	0.19	15.000	23.000	350.000	0.600	11.000	NIL	NIL	NIL	NIL
			153.29	153.70	0.41	175.000	26.000	560.000	2.000	26.000	NIL	NIL	NIL	NIL
		STRUCTURE: Ragged or embayed contacts 25-30 to CA.	162.45	162.90	0.45	55.000	45.000	137.000	1.000	7.000	NIL	NIL	NIL	NIL
			163.10	163.67	0.57	15.000	75.000	76.000	0.600	6.000	NIL	NIL	NIL	NIL
		128 to 131.5: Similar in colour and qtz eye abundance to previous	166.85	167.75	0.90	25.000	55.000	175.000	0.900	58.000	NIL	NIL	NIL	NIL
		subinterval. Less bleached, no banded sulphide, and spotted												
		with 15-25% < 1mm pale grey-white fsp phenocrysts. 70% +												
		aphanitic groundmass. Commonly with open crosscutting												

ALTERATION: 1-2% very fine disseminated Py.

STRUCTURE: Foliation 70-75 to CA.

COMMENTS: Fractures presumably filled at one time and dissolved/washed by groundwater and/or during drilling.

gash-like fractures, some partially calcite filled.

HOLE No: NR9615

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

									ASSAY	S				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		130.7, 131.6: < 5cm wide crosscutting qtz veins.												
		ALTERATION, TRADE DV												
		ALTERATION: THACE FY.												
		STRUCTURE: Both approx. 30 to CA. Foliation 65-70 to CA.												
		131.5 to 132.45: Fine grained, no banding. 1-2% disseminated Py.												
		A) TEDATION: 1-2V discominated Dy fracture controlled												
		Py, 5%, banding below 132m, resembling 121-128m.												
		•												
		132.45 to 134.35: Similar to interval from 128-131.5, spotted												
		with the isp.												
		- ALTERATION: Above 133.30, approximately 5% Py, most from												
		fractures similar to those in previous subinterval.												
		- STRUCTURE: Foliation 75 to CA.												
		134 5 Similar to interval from 114 45-121 . Beakly handed												
		< 1% gtz eves, very rare. Foliation parallel Py +/- calcite seams												
		< 5mm wide. Coarser intervals up to 10-15% < 2mm fsp												
		phenocrysts. e.g. 142.4-152. 4cm wide qtz stringers, crosscutting												
		at 30 to CA at 149.8, 151.3.												
		ALTERATION: 1-2% fine Py below 133.3. 1-3% fine disseminated												

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9615

															_
									ASSAY	5					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Znpprn	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Polippio	
		Py. 2-3% fracture controlled seams from 139.29-142.00.													
		Trace 1% Py.													
		•													
		STRUCTURE: Foliation 70-80 to CA except for 139-142,													
		where 65 to CA is common.													
		153.55: Subconcordant qtz vein, 20cm wide.													
		•													
		ALTERATION: Trace Py < 1% tourmaline.													
		STRUCTURE: Both contacts average 60 to CA.													
		•													
		Below 155m: fsp phenocrysts < 1-2mm in size constitute													
		10-20% of rock.													
		102.6 to 103, 103.15 to 103.57, 100.05 to 107.70; CA parallel													
		qtz stringers < Sim wide.													
		• ALTERATION: Trace 17 Dv. tr tourmaline													
		Allekarion, frace farry, cr confination,													
		STRUCTURE: All three < 10 to CA.													
		168.2 to 171: Weakly banded, due to Chl-Ser along foliation													
		parallel shear planes. Strongly banded from 171-171.6.													
		STRUCTURE: Foliation 65-75 throughout interval from													
		155-191m, End of hole.													

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9615

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									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
171.6	181.0	BANDED FRAGMENTAL (Banded Fragmental) - Medium	171.03	171.65	0.62	10.000	33.000	48.000	0.200	NIL	NIL	NIL	NIL	NIL
		grey, streaked with narrow, < 1mm, white coloured fsp rich	171.65	172.06	0.41	20.000	8.000	16.000	NIL	NIL	NIL	NIL	NIL	NIL
		laminae "interstitial" to fragments. 80-90% very fine	175.86	176.46	0.60	NIL	6.000	5.000	NIL	NIL	NIL	NIL	NIL	NIL
		grained grey dacitic fragments. Many likely broken-shattered	177.35	178.03	0.68	NIL	17.000	12.000	NIL	NIL	NIL	NIL	NIL	NIL
		during deformation. Strongly flattened. Most < 5mm thick.	180.13	180.88	0.75	40.000	90.000	218.000	0.700	8.000	NIL	NIL	NIL	NIL
		No qtz eyes, tr mafic silicates. The largest fragments												
		up to 1cm thick occur between 175 and 178m.												
		•												
		ALTERATION: Trace 1% very fine Py. Weakly bleached												
		very little sericite.												
		STRUCTURE: Foliation uniformly 75 throughout. Appears												
		graded. Small uniform sized fragments at top, medlg.												
		fragments toward bottom.												
		COMMENTS: Whole rock sample at 172m, just to be certain												
		A isn't a shattered chert.												
171.6	187.45	Fragmental QID ( QID, frag, mg) - medium grained. Banded	180.88	181.65	0.77	35.000	14.000	105.000	0.300	13.000	NIL	NIL	NIL	NIL
		grey-white. Contains 4-5% generally small qtz eyes. Upper	181.65	182.35	0.70	50.000	23.000	176.000	0.600	23.000	NIL	NIL	NIL	NIL
		contact transitional to qtz eye crystal tuff, with some relatively	185.50	186.46	0.96	230.000	29.000	130.000	2.000	23.000	NIL	NIL	NIL	NIL
		small fragments, some having eyes, some without. Eyes also	186.46	187.44	0.98	225.000	13.000	130.000	3.600	60.000	NIL	NIL	NIL	NIL
		present within groundmass. Fragments clearly evident within												
		top metre of interval and below 186m.												

ALTERATION: 3-5% fine-medium grained disseminated

## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9615

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									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		Py. Weakly-mod. bleached. Moderate-strong sericitization.												
		STRUCTURE: Banding due in part to flattened fragments,												
		and in part due to concentration of micas along shear planes.												
		•												
		COMMENTS: Weak lineation evident below 181m.												
		Crennulation on foliation plane rakes variably from 50-70,												
		to 65-70, which is the most common.												
		•												
		176.3: 5mm crosscutting qtz vein with, 5–10%												
		tourmaline, tr Py. Weak kinking of foliation around crosscutting												
		1cm wide qtz stringers at 182.1 and 185.75, both 30-35 to CA.												
		STRUCTURE: 176.3, vein at 35 to CA.												
187 45 19	1.11	MED. GRAINED OID (OID ma) - Medium opained	187 44	187 70	0.26	140,000	35,000	112 000	4 800	146.000	NTI	NTI	NTI	NTI
10/145 17		gtz eve crystal tuff, light grey, Contains 3-5% smmed. size	187.70	188.54	0.84	225,000	123.000	90.000	5.400	20,000	NIL	NIL	NIL	NTL
		gtz eyes. Fine fsp crystals visible within groundmass.	188.54	189.29	0.75	460.000	30.000	72.000	1,500	13.000	NIL	NIL	NIL	NIL
		but almost completely altered to sericite fragments evident	189.29	189.55	0.26	245.000	28.000	114.000	0.900	47.000	NIL	NIL	NIL	NIL
		from 188.30-188.50.	190.69	191.11	0.42	255.000	27.000	83.000	0.600	11.000	NIL	NIL	NIL	NIL
		ALTERATION: 2-3% fine disseminated Py to 3-4% locally over												
		15-25cm. Moderately bleached, strongly sericitized.												
		STRUCTURE: Weakly banded due to variations in the												

degree of bleaching and abundance of sericite.

## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9615

												ASSAY	s				
FROM	TO	LITHC 188.55: 10-15cm	DLOGICAL DESCRIPT wide subconcords	TION ant qtz calcite v	ein with	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pio pipini	Coppm	Nippm	Ptppb	Pd ppb
		sneared sericiti	zed wattrock ind	custons.													
		ALTERATION: Trac	ce Py.														
		STRUCTURE: Vein	at 60-65 to CA.														
		189.25 to 189.5: abundant sericit	: 60% subconcorda te at contacts.	ant qtz calcite v	eins, two, with												
		ALIEKATION: Trac	e is py within v	veins, tr tourmat	ine.												
		STRUCTURE: Folia	ation at end of h	hole, 75 to CA.													
		DOM	IN-HOLE SURVEY DA	ATA													
		DEPTH	INCLINATION	BEARING													
		58.00	-60.00	0.00													
		120.00	-56.00														
		164.00	-53.00	11.00													
		191.11	-53.00														

#### DIAMOND DRILL LOG

HOLE No.: NR9618 Collar Eastings: -1200.00 Collar Northings: 675.00 Collar Elevation: 15.00 Grid: Rich Drill contractor, Ultra Mobile Diamond Drilling.

**PROPERTY:** Richardson

Collar Inclination: -60.00 Grid Bearing: 0.00 Final Depth: 185.01 metres Logged by C.A.Wagg Logged by: Date: 22/03/96-25/03/96 Down-hole Survey: Acid Test DDH drilled on claim Lot6,ConII, Richard

ASSAYS FROM WIDTH Auppeb Cupper Znpper Agpper Poipper Copper Nipper Ptppb Poippe FROM 10 LITHOLOGICAL DESCRIPTION TO 0 34.55 OVERBURDEN (OB) - Boulders above 34.55. Granitic and fine-coarse gabbro, two varieties, one with fsp, one porphyritic with pyx phenocrysts. 34.55 37.20 MAFIC METAVOLCANICS (Maf. Vol.) - fine grained. Medium-dark green, gabbroic in appearance and composition where least altered. Now 50-60% mafic silicates primarily amphibole. 30-50% calcite and plagioclase. Trace blue qtz, 5-7% opaques. Below 36.75, moderately chloritized, trace magnetism. ALTERATION: Moderate pervasive calcite alteration, weak chloritization. 1-2% fine disseminated Py. Strongly magnetic, spotted with up to 5% fine magnetite above 36.75. 2-3% fine disseminated Py. STRUCTURE: Moderately foliated at 65-70 to CA. 37.20 39.70 INTERMEDIATE CRYSTAL TUFF (QID, fg) fine grained. Light grey green. Likely andesitic-dacitic in composition. 1-2% < 1mm gtz eyes present above 38m.

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

									ASSAY	s					
FROM	то	LITHOLOGICAL DESCRIPTION Calcite altered fsp. Weakly banded/bedded parallel to foliation. Intermediate to felsic at top grading to mafic to intermediate at bottom. Mafic silicate content varies from 8-10% at top to 25-30% at bottom, mostly chlorite. Feldspar rich lapilli < 2mm and trace qtz eyes present below 38m.	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nîppen	Pt ppb	РЬ ррь	
		- ALTERATION: 2-3% fine disseminated Py.													
		- STRUCTURE: Foliation 70 to CA, rarely to 65.													
39.7	41.95	MAFIC METAVOLCANICS (Maf. Vol.) - similar to interval from 34.55-37.20, but slightly coarser grained and very weakly magnetic. Trace 1% fine pyroxene present, no qtz noted.	41.28	41.76	0.48	30.000	121.000	130.000	0.200	NIL	NIL	NIL	NIL	NIL	
		ALTERATION: "Amphibolitized" with weak-mod. pervasive calcite alteration, fsp replacement?, and weak chloritization. 3-5% fine-med. grained disseminated Py.													
		STRUCTURE: Well foliated at 70 to CA. Both contacts gradational over 10-20cm, and appear to be foliation parallel.													
41.95	44.0	MIXED MAFIC/FELSIC PYROCLASTICS (Mixed Mafic/Felsic Pyroclastics) - essentially a unit of dacitic qtz eye tuff with several 10-30cm													

## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

									ASSAY	6					
FROM	то	LITHOLOGICAL DESCRIPTION thick intervals of mafic extrusive to pyroclastic material. Tuff 1-5% smmed. size qtz eyes, up to 15% fine mafic silicates, banded due to weak bleaching/k-spar alteration along foliation parallel slips and fractures.	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Coppm	Ni ppm	Pt ppb	Pb ppb	
		ALTERATION: 1-2% fine Py. Strong k-spar/chlorite alteration at tuff-mafic contact at 42.85 coincident around 5-10cm wide qv.													
		STRUCTURE: Vein contacts fracture controlled. Top 40 to CA, bottom 65-70 to CA, foliation parallel. Contacts foliation parallel.													
		42.85 to 43.10 and 43.88 to 44.0: Mafic units fine grained mod-strongly chloritized and calcite altered. Banded in places on mm scale, possibly fragmental.													
		STRUCTURE: Both units well foliated. Foliation 70 to CA.													
44.1	56.45	DACITIC QTZ EYE CRYSTAL TUFF (QID, fg-mg) - fine-med. grained. Medium grey, pinkish hued due to alteration. 10-20% fine mafic silicates, amphibole, minor chlorite. 5-7% smmed. size qtz eyes, locally as low as 3% or as high as 10%. Includes 62cm interval of mafic metavolcanics from 46.89-47.53, resembling those from 42.85-43.1 and 43.88-44.0.	46.92	47.56	0.64	20.000	56.000	125.000	NIL	NIL	NIL	NIL	NIL	NIL	

# DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

											_ ~ ~ ~ ~ ~ ~		
								ASSAY	s				
то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Соррля	Ni ppm	Pt ppb	Pb ppb
	Probably tuffaceous to fragmental.												
	ALTERATION: Weak chloritization of amphiboles.												
	Mod-strong pervasive k-spar alteration of groundmass												
	and along foliation parallel slips and fractures, only												
	above 52.75 and below 56.15. 3-5% fine disseminated												
	Py, mod-strongly chloritized.												
	•												
	STRUCTURE: Foliation 65-70 to CA.												
	•												
	COMMENTS: Individual flow contacts at 45.75, and 48.75.												
50.07		E4 95	57 F/	0 40	E 000	92 000	8/ 000	N.T.1	NTI	NTI	NTI	NTI	NTI
<b>39.93</b>	MAFIL MEIAVULLANILS (MAT. VOL., TG) -	50.05	57.34	0.09	5.000	02.000	04.000	MIL		MIL	NIL	NIL	MIL
	fine grained. Spotted to streaked green with white.												
	Strongly follated, intensely altered, possibly sheared.												
	consisting of subequal amounts of citorite and catche,												
	Where most attered. 40-50% ampriloote, 10-20% biotite,												
	57 75 linested with a distinctive texture of red should												
	sting falsis composition (a motod provisually in hole 12												
	and 16												
	and to.												
	• ALTERATION: Strong Chl.colcite siteration weak sericite												
	1-2% fine disseminated By												
	• STRUCTURE: Banded alternating chloritic vs. calcite rich												
	laware at top of unit. Faliation contected and falded												
	TO 59.93	<ul> <li>LITHOLOGICAL DESCRIPTION Probably tuffaceous to fragmental.         <ul> <li>ALTERATION: Weak chloritization of amphiboles.</li> <li>Mod-strong pervasive k-spar alteration of groundmass and along foliation parallel slips and fractures, only above 52.75 and below 56.15. 3-5% fine disseminated Py, mod-strongly chloritized.             <li>STRUCTURE: Foliation 65-70 to CA.</li> <li>COMMENTS: Individual flow contacts at 45.75, and 48.75.</li> </li></ul> </li> <li>59.93 MAFIC METAVOLCANICS (Maf. Vol., fg) -         <ul> <li>fine grained. Spotted to streaked green with white.</li> <li>Strongly foliated, intensely altered, possibly sheared.</li> <li>Consisting of subequal amounts of chlorite and calcite, where most altered. 40-50% amphibole, 10-20% biotite, 20-30% calcite, after fsp?, where least altered. Below 57.75, lineated, with a distinctive texture of rod shaped mafic-felsic segregation's, noted previously in hole 12 and 16.             <ul> <li>ALTERATION: Strong Chl-calcite alteration, weak sericite 1-2% fine disseminated Py.</li> <li>STRUCTURE: Banded alternating chloritic vs. calcite rich</li> </ul> </li> </ul></li></ul>	10       LITHOLOGICAL DESCRIPTION       FROM         Probably tuffaceous to fragmental.       .       .         ALTERATION: Weak chloritization of amphiboles.       Mod-strong pervasive k-spar alteration of groundmass and along foliation parallel slips and fractures, only above 52.75 and below 56.15. 3-5% fine disseminated Py, mod-strongly chloritized.       .         STRUCTURE: Foliation 65-70 to CA.       .       .         COMMENTS: Individual flow contacts at 45.75, and 48.75.       .       .         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) - fine grained. Spotted to streaked green with white.       .       .         Strongly foliated, intensely altered, possibly sheared.       .       .       .         Consisting of subequal amounts of chlorite and calcite, where most altered. 40-50% amphibole, 10-20% biotite, 20-30% calcite, after fsp7, where least altered. Below 57.75, lineated, with a distinctive texture of rod shaped mafic-felsic segregation's, noted previously in hole 12 and 16.       .         ALTERATION: Strong Chl-calcite alteration, weak sericite 1-2% fine disseminated Py.       .       .         STRUCTURE: Banded alternating chloritic vs. calcite rich       .       .	10       LITHOLOGICAL DESCRIPTION       FROM       T0         Probably tuffaceous to fragmental.       .       .       .         .       ALTERATION: Week chloritization of amphiboles.       Mod-strong pervasive k-spar alteration of groundmass and along foliation parallel slips and fractures, only above 52.75 and below 56.15.       3-5% fine disseminated Py, mod-strongly chloritized.       .       .         .       .       .       .       .       .         .       .       .       .       .       .         .       .       .       .       .       .         .       .       .       .       .       .         .       .       .       .       .       .         .       .       .       .       .       .         .       .       .       .       .       .       .         .       .       .       .       .       .       .       .       .         .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .	TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH         Probably tuffaceous to fragmental.       ALTERATION: Weak chloritization of amphiboles.       Mod-strong pervasive k-spar alteration of groundmass and along foliation parallel slips and fractures, only above 52.75 and below 56.15.       3-5% fine disseminated       Py, mod-strongly chloritized.         STRUCTURE: Foliation 65-70 to CA.       .       .       .       .         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) -       .       .       .       .         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) -       .       .       .       .       .         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) -       .       .       .       .       .         50.93       MAFIC METAVOLCANICS (Maf. Vol., fg) -       .       .       .       .       .         50.93       MAFIC METAVOLCANICS (Maf. Vol., fg) -       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .	TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb         Probably tuffaceous to fragmental.       ALTERATION: Weak chloritization of amphiboles.       Mod-strong pervasive k-spar alteration of groundmass and along foliation parallel slips and fractures, only above 52.75 and below 56.15.       3-5% fine disseminated       Py, mod-strongly chloritized.         STRUCTURE: Foliation 65-70 to CA.       .       .       .         COMMENTS: Individual flow contacts at 45.75, and 48.75.       56.85       57.54       0.69       5.000         fine grained. Spotted to streaked green with white.       Strongly foliated, intensely altered, possibly sheared.       .       .       .         consisting of subequal amounts of chlorite and calcite, where most altered. 40-50% amphibole, 10-20% biotite, 20-30% calcite, after fsp7, where least altered. Below       .       .       .         s7.75, lineated, with a distinctive texture of rod shaped mafic-felsic segregation's, noted previously in hole 12 and 16.       .       .       .         ALTERATION: Strong Chl-calcite alteration, weak sericite 1-2% fine disseminated Py.       .       .       .         STRUCTURE: Banded alternating chloritic vs. calcite rich       .       .       .       .	TO       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm         Probably tuffaceous to fragmental.       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .	10       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm         Probably tuffaceous to fragmental.       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .	10       LITHOLOGICAL DESCRIPTION       FROM       TO       WIDTH       Au ppb       Cu ppm       Zn ppm       Ag ppm         ALTERATION: Weak chloritization of amphiboles.       Hod-strong pervasive k-spar alteration of groundmass and along foliation parallel slips and fractures, only above 52.75 and below 56.15.       3-5% fine disseminated       Py, mod-strongly chloritized.         STRUCTURE: Foliation 65-70 to CA.       .       .       .         COMMENTS: Individual flow contacts at 45.75, and 48.75.       56.85       57.54       0.69       5.000       82.000       84.000       NIL         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) -       56.85       57.54       0.69       5.000       82.000       84.000       NIL         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) -       .       .       .       .       .         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) -       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .	ASSAYS         TO       LITHOLOGICAL DESCRIPTION       FROM TO WIDTH Au ppb Cu ppm Zn ppm Ag ppm Pb ppm         Probably tuffaceous to fragmental.       .       .         ALTERATION: Weak chloritization of amphiboles.       Modestrong pervasive kespar alteration of groundmass and along foliation perallel slips and fractures, only above 52.75 and below 56.15. 3-5% fine disseminated Py, modestrongly chloritized.       .         .       .       .       .         STRUCTURE: Foliation 65-70 to CA.       .       .         .       .       .       .         59.93       MAFIC METAVOLCANICS (Naf. Vol., fg) -       .       .         fine grained. Spotted to streaked green with white.       .       .         Strongly foliated, intensely altered, possibly sheared.       .       .         .       .       .       .         .       .       .       .         .       .       .       .         .       .       .       .         .       .       .       .         .       .       .       .         .       .       .       .         .       .       .       .         .       .       .<	ASSAYS         TO       LINOLOGICAL DESCRIPTION         FROM TO WIDTH Au pob Cu pom Zn pom Ag pom Pb pom Co pom         Assays         ASSAYS         TO       LINOLOGICAL DESCRIPTION         Probably tuffaceous to fragmental.         ALTERATION: Weak chloritization of amphiboles.         Mod-strong pervasive K-spar alteration of groundmass       and along foliation parallel slips and fractures, only above 52.75 and below 55.15. 3-5% fine disseminated Py, mod-strongly chloritized.       .         STRUCTURE: Foliation 65-70 to CA.       .       .         COMMENTS: Individual flow contacts at 45.75, and 48.75.       .       .         59.93       MAFIC METAVOLCANICS (Maf. vol., fg) - fine grained. Spotted to streaked green with white.       .       .         Strongly foliated, intensely altered, possibly sheard.       .       .       .         Consisting of subequal amounts of chlorite and calcite, where most altered. 40-50% amphibole, 10-20% biotite, 20-30% calcite, after fsp?, where least altered. Below 57.75, lineated, with a distinctive texture of rod shaped mafic-felsic segregation's, noted previously in hole 12 and 16.       .       .         .       .       .       .       .         .       .       .       .       .         . <td< td=""><td>TO       LITHOLOGICAL DESCRIPTION       ASSAYS         TO       LITHOLOGICAL DESCRIPTION       FROM TO WIDTH Au pob Cu ppm Zn ppm Ag ppm Pb ppm Co ppm Ni ppm         ALTERATION: Week chloritization of amphiboles.       Modistrong pervasive k-spar alteration of groundmass and along foliation parallel sites and fractures, only above 52.75 and below 56.15. 3-5X fine disseminated Py, mod-strongly chloritized.       FROM TO WIDTH Au pob Cu ppm Zn ppm Ag ppm Pb ppm Co ppm Ni ppm above 52.75 and below 56.15. 3-5X fine disseminated Py, mod-strongly chloritized.         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) - fine grained. Spotted to streaked green with white.       56.85       57.54       0.69       5.000       82.000       84.000       NIL       NIL       NIL       NIL       NIL       NIL       NIL         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) - fine grained. 40-50X amphibole, 10-20X biotite, does not altered. Below 57.75, lineated, with a distinctive texture of rod shaped mafic-felsic segregation's, noted previously in hole 12 and 16.       56.85       57.54       0.69       5.000       82.000       84.000       NIL       NIL       NIL       NIL         AltERATION: Strong Chl-calcite alteration, weak sericite 1-22 fine disseminated Py.       STRUCTURE: Sanded elternating chloritic vs. calcite rich       STRUCTURE: Sanded elternating chloritic v</td><td>TO       LITHOLOGICAL DESCRIPTION         Probably tuffaceous to fragmental.         ALTERATION: Veak chloritization of amphiboles.         Mod-strong pervasive k-spen alteration of groundmass and along foliation parallel slips and fractures, only above 52.75 and below 56.15. 3-5% fine disseminated Py, mod-strongly chloritized.         STRUCTURE: Foliation 65-70 to CA.         COMMENTS: Individual flow contacts at 45.75, and 48.75.         59.93       MAFIC METAVOLCANICS (Maf. Vol., (g) - fine graimed, spotted to streaked green with white. Strongly foliated, intensely altered, possibly sheared. Consisting of subequal amounts of chlorite and calcite, where most altered. 40-50% amphibole, 10-20% biotite, 20-30% calcite, after fspr, where least altered. Below 57.75, lineated, with a distinctive texture of rod shaped mafic-felsic segregation's, noted previously in hole 12 and 16.              STRUCTURE: Bended alternating chloritic vs. calcite rich 1-2% fine disseminated Py.                                                         </td></td<>	TO       LITHOLOGICAL DESCRIPTION       ASSAYS         TO       LITHOLOGICAL DESCRIPTION       FROM TO WIDTH Au pob Cu ppm Zn ppm Ag ppm Pb ppm Co ppm Ni ppm         ALTERATION: Week chloritization of amphiboles.       Modistrong pervasive k-spar alteration of groundmass and along foliation parallel sites and fractures, only above 52.75 and below 56.15. 3-5X fine disseminated Py, mod-strongly chloritized.       FROM TO WIDTH Au pob Cu ppm Zn ppm Ag ppm Pb ppm Co ppm Ni ppm above 52.75 and below 56.15. 3-5X fine disseminated Py, mod-strongly chloritized.         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) - fine grained. Spotted to streaked green with white.       56.85       57.54       0.69       5.000       82.000       84.000       NIL       NIL       NIL       NIL       NIL       NIL       NIL         59.93       MAFIC METAVOLCANICS (Maf. Vol., fg) - fine grained. 40-50X amphibole, 10-20X biotite, does not altered. Below 57.75, lineated, with a distinctive texture of rod shaped mafic-felsic segregation's, noted previously in hole 12 and 16.       56.85       57.54       0.69       5.000       82.000       84.000       NIL       NIL       NIL       NIL         AltERATION: Strong Chl-calcite alteration, weak sericite 1-22 fine disseminated Py.       STRUCTURE: Sanded elternating chloritic vs. calcite rich       STRUCTURE: Sanded elternating chloritic v	TO       LITHOLOGICAL DESCRIPTION         Probably tuffaceous to fragmental.         ALTERATION: Veak chloritization of amphiboles.         Mod-strong pervasive k-spen alteration of groundmass and along foliation parallel slips and fractures, only above 52.75 and below 56.15. 3-5% fine disseminated Py, mod-strongly chloritized.         STRUCTURE: Foliation 65-70 to CA.         COMMENTS: Individual flow contacts at 45.75, and 48.75.         59.93       MAFIC METAVOLCANICS (Maf. Vol., (g) - fine graimed, spotted to streaked green with white. Strongly foliated, intensely altered, possibly sheared. Consisting of subequal amounts of chlorite and calcite, where most altered. 40-50% amphibole, 10-20% biotite, 20-30% calcite, after fspr, where least altered. Below 57.75, lineated, with a distinctive texture of rod shaped mafic-felsic segregation's, noted previously in hole 12 and 16.              STRUCTURE: Bended alternating chloritic vs. calcite rich 1-2% fine disseminated Py.

#### DIAMOND DRILL LOG

PROPERTY:	Richardson
HOLE No.:	NR9618

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION for 30cm above a 10cm wide qv at 65-70 to CA. At 57.25 lineation rakes approx. 70 degrees, in foliation plane. Lower contact 50 to CA. Foliation parallel.	FROM	то	WIDTH	Au ppb	Cuppm	Zn ppm	Ag ppm	Pib ppm	Co ppm	Nî ppm	Pt ppb	РЬ рро
59.93	61.75	FINE DACITE QTZ EYE CRYSTAL TUFF (QID, fg) - similar to interval from 44.1-56.45, but finer grained. Only 3-5% smmed. sized qtz eyes and with weak pervasive k-spar alteration of groundmass. ALTERATION: 1-2% fine disseminated Py. STRUCTURE: Weakly-moderately foliated at 75-80 to CA.												
61.75	63.86	MAFIC METAVOLCANICS (Maf. Vol.) - similar to interval from 56.45-59.93, but with a weak rod-like texture resulting from lineation development, below 63.2. Strongly banded, alternating chlorite vs. calcite. ALTERATION: Strong chloritization, moderate calcite alteration. 1-2% fine Py. STRUCTURE: Top contact 65 to CA, foliation parallel. Foliation 65 to CA at 61.75, 80 to CA at 63.80. Lower contact 80 to CA.												

DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

				_					ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Соррт	Ni ppm	Pt ppb	РЬ ррв
63.86	70.4	DACITE QTZ EYE CRYSTAL TUFF (QID) - similar to interval from 59.93-61.75, with rare slightly bleached zones 10-40cm in length. Spotted with up to 5-10% < 2mm calcite crystals, after plagioclase phenocrysts? Mafic silicates mostly chlorite. ALTERATION: 1-3% fine disseminated Py. STRUCTURE: Foliation 70-75 to CA.												
70.4	72.87	MAFIC METAVOLCANICS (Maf. Vol.) - similar to interval from 61.75-63.86 but less altered, and less banded. Probably extrusive, but likely not pyroclastic. ALTERATIOM: 1-2% fine disseminated Py. STRUCTURE: Foliation 70-75 to CA. Both contacts foliation parallel.												
72.87	108.40	FINE-MED. QTZ EYE DACITE CRYSTAL TUFF (QID, fg-mg) - similar to interval from 63.86-70.4, but banded due to mm wide bleaching +/- k-spar along frequent subconcordant fractures spaced < 1cm apart. 5-10% qtz eyes.	86.00	86.65	0.65	10.000	7.000	46.000	NIL	NIL	NIL	NIL	NIL	NIL

#### DIAMOND DRILL LOG

TO

FROM

#### **PROPERTY:** Richardson HOLE No.: NR9618

FROM

то

WIDTH Auppolo Cupper Znpper Agipper Poloper Copper Nipper Ptppolo

Page 7

ALTERATION: 1-3% fine disseminated Py. Moderate fracture-controlled to pervasive k-spar alteration from 76.30-77.9.

LITHOLOGICAL DESCRIPTION

86.15 to 86.60: Irregular shaped qtz vein.

ALTERATION: 3-5% chlorite, trace Py k-spar.

STRUCTURE: Top contact 70-75 to CA, foliation parallel. Lower contact crosscutting at < 15 to CA. Foliation 70-75 to CA, rarely to 80 at 99.5-100.75m.

108.4 126.50 MAFIC METAVOLCANICS (Maf. Vol.) -

similar to interval from 70.4-72.87. Banded, primarily due to common, 3-5% calcite stringers along foliation parallel and less common subconcordant to crosscutting fractures. Include intervals of dacite from 116.1-116.35, 121.10-123.85, and 125.25-125.70, all with sharp foliation parallel contacts, resembling interval from 72.87-108.4.

ALTERATION: Trace to very weak magnetism. Mod-strong pervasive Chl-calcite alteration. 1-3% fine disseminated calcite +/- qtz stringers contain only trace Py. 1-3% fine disseminated Py overall. Calciterestricted to fractures.

STRUCTURE: Well foliated at 65-80 to CA, averaging

112.70	113.42	0.72	5.000	97.000	90.000	NIL	NIL	NIL	NIL	NIL	NIL
113.42	114.11	0.69	25.000	69.000	70.000	NIL	NIL	NIL	NIL	NIL	NIL
114.11	114.93	0.82	NIL	68.000	77.000	NIL	NIL	NIL	NIL	NIL	NIL

ASSAYS

DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

									ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION 70-75. Foliation 116.25, 70-75 to CA, at 122 70 to CA, at 125.5, 80 to CA.	FROM	то	WIDTH	Auppb	Cuppm	Zn ppri	Ag ppm	Pib pipmi	Co ppm	Ni ppm	Pt ppb	Pb ppb	
126.5	154.50	FINE-MED. QTZ EYE DACITE TUFF (QID, fg-mg) - similar to interval from 72.87-108.40. Weakly banded due to minor bleaching along closely spaced subconcordant	141.25 141.60 146.08	141.60 142.34 146.81	0.35 0.74 0.73	60.000 40.000 1810.000	6.000 6.000 41.000	47.000 27.000 1000.000	NIL NIL 0.400	2.000 NIL 3.000	NIL NIL NIL	NIL NIL NIL	NIL NIL NIL	NIL NIL NIL	
		<pre>Tractures. Banding ends about 145m ALTERATION: 1-3% fine disseminated Py. Weak Chl- sericite alteration. Calcite restricted to fractures STRUCTURE: Foliation 65-70 to CA. Foliation 80-85 at 141-142, 70-75 above 154, and 85 to CA at 154.40m 141.60 to 142.30: Barren qtz vein ALTERATION: Minor bleaching of wallrock over &lt;5cm STRUCTURE: Top contact approx. 30 to CA. Lower contact broken, probably about 30 to CA.</pre>													
154.5	156.58	MAFIC-INTERMEDIATE DYKE (Mafic-Intermediate Dyke) - fine grained, medium green. Weakly foliated near both contacts. Subequal fine fsp and mafic silicates, largely chloritized. Possibly andesitic in bulk chemistry, based largely on colour. Medium grained from 154.20-154.45 resembles qtz gabbro. Apparently a second dyke of generally													

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

FROM	то	LITHOLOGICAL DESCRIPTION similar composition.	FROM	то	WIDTH	Auppb	Cu ppm	Zn ppm	ASSAY Agippin	S Pbppm	Coppm	Nippm	Pt ppb	Pb ppb	
		ALTERATION: Moderate chloritization and pervasive calcite alteration. 2-3% fine disseminated Py. 2cm wide band of disseminated Py, approximately 50% Py, at lower contact. STRUCTURE: Both contacts foliation parallel. Top 70-75 to CA, bottom 75-80 to CA.													
156.58	157.53	FINE QTZ EYE DACITE CRYSTAL TUFF (QID, fg) - resembles interval from 59.93-61.75. ALTERATION: 2-3% fine disseminated Py, to 3-4% over 30-50cm where rare foliation parallel fracture- controlled seams occur.	156 <b>.</b> 50	157.22	0.72	115.000	87.000	130.000	0.500	6.000	NIL	NIL	NIL	NIL	
157.53	173.88	MAFIC METAVOLCANICS (Maf. Vol.) - similar to interval from 34.55-37.20. Spotted to weakly banded with calcite. Gabbroic in appearance, where coarsest/least altered, with amphibole, after pyroxene?, medium grained compared with fine grained groundmass.	160.40	160.96	0.56	20.000	91.000	97.000	NIL	NIL	NIL	NIL	NIL	NIL	
		ALTERATION: Modstrong pervasive Chl-calcite alteration. Moderate-strongly magnetic from 162.2- 163.85. 3-5% fine disseminated magnetite.													

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

									ASSAY	 s				
FROM	ro	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Си ррт	Zn ppm	Ag ppm	Pb ppm	Со ррт	Nippm	Pt ppb	РЬ ррь
		STRUCTURE: Top contact 80-85 to CA. Moderately lineated throughout, raking < 10 in plane of foliation.											·	
		160.50 to 160.90: 25% foliation parallel, qtz calcite veinlets.												
		ALTERATION: Trace Py, fine masses of chlorite within veinlets and at contacts.												
		STRUCTURE: Foliation 70 to CA. Foliation 65-70 to CA above 172.5.												
173.88	176.44	DACITIC QTZ EYE TUFF (QID, fg-mg) - fine- med. grained. Light-med. grey. Dacitic overall, no qtz eyes and 15-20% fine mafic silicates above 174.50. 5-7% sm med. qtz eyes on average from 174.5-176.44. Fractured; closely-spaced, subconcordant, with minor k-spar and bleaching giving a banded appearance.												
		ALTERATION: 1-3% fine disseminated Py.												
		STRUCTURE: 60-65 to CA from 170-173m. Foliation at top contact 75. Foliation in dacite 80 to CA above 175m, variable from 40 at 175.3 to 70 to CA at 176m. Foliation 80 to CA at lower contact.												

## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

									ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nippm	Pt ppb	Pb ppb	
176.44	182.95	MAFIC METAVOLCANICS (Maf. Vol., fg) -													
		similar to interval from 157.53-173.88. Fine grained.													
		Well foliated for 1-1.5m at margins. 176.44-177.5,													
		banded with rod-like Chl-calcite, lineated fabric, likely a													
		basaltic to andesitic massive flow.													
		ALTERATION: Moderate-strongly chloritized calcite													
		altered 2-3% fine discerning of Pv 1-2% calcite filled													
		fractures randomly oriented < 5mm wide													
		STRUCTURE: Top contact abrupt foliation parallel.													
		lower contact broken to weakly sheared over 40-45cm													
		within mafics. Foliation within contact zone 40-55 to													
		CA.													
192.05	19/ 4		197 40	10/ 74	0 74	50 000	£ 000	80.000	NTI	MTI	NTI	NTI	NT1		
102.93	104.0	oficial to interval from 173 PP-176 (4) Upshive	103.00	104.30	0.75	50.000	0.000	80.000	NIC	MIL	NIL	MIL	MIL	MIL	
		similar to interval from 1/3.00-1/0.44. Weakly													
		banded infougnout from Dieaching along fractures.													
		ALTERATION: 1-2% fine discominated by													
		ALTERATION. 1-24 THE GISSENTIALEU PY.													
		STRUCTURE: Foliation variable from 45 to CA at													
		top contact, to near parallel to CA at 184, 65 to CA at 184.3.													
		to 40 to CA at vein contact. Small scale folding?													
		184.4 to 184.85: 70% vein gtz with fracture-controlled													
		subconcordant contacts.													

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9618

FROM	TO	LITHO	DLOGICAL DESCRIPT	10N		FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	ASSAYS Ag ppm	S Pbppm	Co popra	Nippm	Pt ppb	Pb ppb	
		ALTERATION: 3-45	% fine disseminat potwall wallrock.	ed Py. Chloritized														
		STRUCTURE: Folia	ation around veir	hing 40-45 to CA.														
184.7	185.01	MAFIC METAVOLCAN similar to inter	NICS (Maf. Vol.) rval from 176.44-	- 182.95.	1	184.36	185.01	0.65	15.000	5.000	130.000	NIL	NIL	NIL	NIL	NIL	NIL	
		ALTERATION: Mode over 5-10cm adja	erately bleached acent to qtz veir	and sericitized, ).														
		STRUCTURE: Folia	ation at end of h	nole 50-55 to CA.														
		DO	N-HOLE SURVEY DA	ATA														
		DEPTH	INCLINATION	BEARING														
		36.00	-57.00															
		113.00	-55.00															
		183.00	-54.00															
		185.01	-54.00															

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619 Collar Eastings: -650.00 Collar Northings: -875.00 Collar Elevation: 15.00 Grid: Rich

.

Collar Inclination: -75.00Logged by: C.A. WaggGrid Bearing: 0.00Date: 23/03/96-27/03/96Final Depth: 329.10 metresDown-hole Survey: Sperry Sun/Acid TestDDH drilled on claim Lot5,ConI, Richardson Twp.Drill contractor, Bradley Bros. Dia

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									ASSAY	'S				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pib ppm	Со ррт	Ni ppm	Pt ppb	Pd ppb
0	3.6	OVERBURDEN (OB) - Lowermost .6m												
		bedrock. Similar to unit described below.												
	47.7		0 75	0.05	0.70	F	75 000	126 000		6 000				ALT I
3.0	17.2	MAFIC INTERMEDIATE HETAVOLCANICS (MAT. VOL., INT.) -	8.75	9.05	0.50		75.000	120.000	NIL	4.000	NIL	NIL	MIL	
		fine grained. Medium grey-green to dark brown andesitic?	9.05	9.47	0.42	22	83.000	320.000	1.400	8.000	NIL	NIC	NIL	NIL
		in composition. Above 9.5m, strongly banded due to shearing/	14.58	15.02	0.44	25	66.000	166.000	0.800	4.000	NIL	NIL	NIL	NIL
		fracturing with calcite +/- qtz resealing fractures. Below 5.7m												
		qtz-calcite filled amyqdules occasionally present.												
		Common, approximately 5% from 10.4-13.0. Rare from												
		14-17m. Short intervals of calcite cemented microbreccia												
		over 10cm at 6.8m, 30cm at 8.1, 20cm at 9.10.												
		ALTERATION: Moderate biotite alteration at margins of												
		unsheared lozenges. Moderate pervasive calcite alteration.												
		Trace 12 By												
		Hace IN Fy.												
		STRUCTURE: Enlightion (5-50 to CA of ( Om folightion 55 to												
		CA BT 8.5M.												
		COMMENTS: Fine extrusive, banded with some biotite.												
		•												
		8.8 to 9.24: Subconcordant calcite and qtz vein.												

### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

							*** *** *** *** ***								
									ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION ALTERATION: Sericitized wallrock. 3-5% fine Py, most replacing inclusions of wallrock. Trace tourmaline	FROM	то	WIDTH	Au ppb	Cu ppm	2n ppm	Ag ppm	Pb ppm	Сорфия	Nî ppm	Pt ppb	Pd ppb	
		STRUCTURE: Foliation 40-45 to CA.													
		14.75 to 15.15: Strongly bleached, epidote-sausserite-calcite altered interval with a few percent qtz stringers and generally coarse late? sulphides.													
		- ALTERATION: 1-2% Py with minor pyritic inclusions < 1%. Trace muscovite, tourmaline, kyanite, all apparently associated with sulphides. 1-2% disseminated Py, in bleached wallrock.													
		STRUCTURE: Zone contacts 20-25 to CA, near perpendicular to foliation at 55-65 to CA.													
17.2	48.17	MAFIC METAVOLCANICS (Maf. Vol.) - medium-crs. grained. Medium grey-green to dark green. Generally mod-strongly magnetic, containing a few to 5% small blue qtz eyes. Mafic silicates 40-60% mostly chloritized amphiboles. Fine feldspars sausseritized, groundmass epidote "rich". Spotted in places with .5 x 1cm clusters of fine amphibole, after pyx phenocrysts?	33.10	33.67	0.57	25	57.000	183.000	0.400	NIL	NIL	NIL	NIL	NIL	
		ALTERATION: < 1% fine Py, most from < 1cm wide filled fractures. 3-5% fine disseminated magnetite													

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

FROM

ASSAYS LITHOLOGICAL DESCRIPTION WIDTH Auppe Cuppra Znppra Agippra Polppra Coppra Nippra Ptppob Polppob FROM τo TO present within well foliated and altered intervals. 1-2% very fine garnet present over 20cm at 28.05m. STRUCTURE: Foliation 45-55 to CA. Foliation 45 to CA at 24.5m. Foliation 55-60 to CA at 29m. 50 to CA at 32m. 29.75 to 31.25: Relatively fresh interval < 20% fsp, 5-7% qtz eyes, remainder amphiboles. Weakly foliated. ALTERATION: 3-5% small-med. sized disseminated Py aggregates, trace 1% fine garnet. COMMENTS: Strongly fractured below 27.5m, > 6/30cm most cemented with hairline calcite fillings. 32.5 to 33.65: Weakly-moderately sheared at 30-40 to CA. Subparallel to adjacent foliation's. Includes 5-10cm wide gtz vein at 33.55. ALTERATION: Strongly Chl-calcite altered. 2-3% Py within vein. 3-5% biotite over 20cm at 35.75. STRUCTURE: Shearing 30-40 to CA. Contacts foliation parallel. Foliation 50-55 to CA at 33.75m. 37.85 to 39.4: Relatively fresh coarse grained. 30% pale grey fsp. 5-7% < 3mm qtz eyes, remainder amphibole rich

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ACCAY	e				
CDOM	70		ED OM	10	UIDTH	Au onb	C.,	7	AG 000	<sup>D</sup> b nom	Co. 000	Nicom	Dt nob	Rd pob
rkum	10	CITROLOGICAL DESCRIPTION	rkom	10	WIDIN	Au ppo	cu ppii	zn ppii	vā hhe	ro ppii	co ppin	и ри	Γιρμο	ru ppo
		qtz gabbro.												
		ALTERATION: 1-3% first discominated by Moderately												
		manatic 2-37 years fine discominated manatite												
		andghetic, 2-3% very time disseminated magnetice.												
		- STRUCTURE: Noll foliated Contacts distinct foliation												
		parattet.												
		·												
		42.55 to 45.75: Similar to interval from 57.65-59.4 but coalser												
		granned, weakty forfated and tess marie. Diorite of qui diorite.												
		ALTERATION: 1% fine Du. Contains (-5% contact to 3mm												
		disseminated memorite over lovermost 5. 6m												
		disseminated magnetite over towermost .5".om.												
		STRUCTURE: Foliation necellel contects no visible chill												
		Sinderloke. Forfactor paratter contacts no visible cirte.												
		43 25 to 48 17. Fina-modium grained gabbroic in appearance												
		43.25 to 40.11. The meatum granned, gaborote in appearance.												
48.17	48.92	QTZ-ESP PORPHYRY (QTZ-ESP Porph.) - Fine grained												
-0111	-01/2	norphyritic. Medium grey with grey-white spots. Top												
		15cm fine crystal tuff no eves/ohenocrysts, lower 60cm												
		atz-fso porphyry flow? 50-60% phenocrysts up to 3mm												
		diameter fsp $>>$ atz 40% fine chlorite 2-3% biotite.												
		ALTERATION: Trace 1% Py. 2-3% fine disseminated Py.												
		Biotite present for several cm from contact with in gabbroic												
		country rock.												
		,												

## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
		STRUCTURE: All contacts, foliation parallel, no chilling.													
		COMMENTS: Strong fracturing > 6/30cm, ends at 53.5m.													
48.92	63.57	MAFIC METAVOLCANICS (Maf. Vol.) - medium- coarse grained. Similar to interval from 17.2-48.17m, but slightly finer grained, moderate-strongly magnetic, weakly- moderately foliated. Subconcordant to crosscutting qtz stringers over 10cm at 51.5, 51.9. 52.4-52.75, crosscutting non-planar qtz vein.	53.30	53.85	0.55	15	158.000	149.000	0.800	10.000	NIL	NIL	NIL	NIL	
		ALTERATION: Trace-1% Py on average, trace Cp, Po along foliation parallel fracture with some qtz at 50.25. Moderate pervasive Chl-calcite alteration. 2-3% Py over 15cm at 51.9. Strong calcite-sausserite alteration of wallrock inclusions and 1-2% fine Py from 52.4-52.75.													
		STRUCTURE: Foliation variable from 45-60 to CA, averaging 50-55. Foliation 60 to CA. Contacts average, approximately 20 to CA. Foliation 55-60.													
		60.19 to 62.83: Mafic to intermediate flow. Well foliated, weakly banded. Medium green-brown, fine grained. 15-20% biotite as 1 x 3-4mm lenses aligned parallel to foliation, presumably of metamorphic origin. Remainder subequal amounts of fine													

DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ASSAYS	5				
FROM	TO	LITHOLOGICAL DESCRIPTION fsp and amphibole.	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Соррт	Ni ppm	Pt ppb	Pd ppb
		ALTERATION: 3-4% disseminated magnetite as < 2mm grains. 1-2% fine Py on average. Weak chlorite, moderate calcite- sausserite alteration.												
		STRUCTURE: Foliation 45-55 to CA. Contacts foliation parallel. Top 50-55 to CA, bottom 40 to CA.												
63.57	64.42	DACITIC FRAGMENTAL (Dacitic Fragmental) - fine grained. Pale grey streaked with black. Poorly sorted small-lg. < 1 to 4cm > fragments set in a reasonably mafic groundmass. Rare angular qtz lapilli to .5 x 1cm.												
		ALTERATION: 3-4% fine-med. grained disseminated Py. Moderate-strong pervasive calcite alteration. 3-4cm wide qv, trace Py 1-2% tourmaline at 65.2m.												
		STRUCTURE: Foliation 40-65. Contacts foliation parallel. Contacts 65-75 to CA.												
		COMMENTS: Mafic ash groundmass Chl > Biotite.												
64.42	104.0	MAFIC METAVOLCANICS (Maf. Vol.) - med	63.57	64.51	0.94	160	64.000	195.000	1.000	9.000	NIL	NIL	NIL	NIL
		coarse grained. Similar to interval from 60.19-62.83. Well	64.51	65.18	0.67	275	39.000	137.000	0.600	6.000	NIL	NIL	NIL	NIL
		foliated, spotted with 10-20% biotite "lenses". Includes	65.18	65.80	0.62	50	95.000	730.000	0.600	3.000	NIL	NIL	NIL	NIL

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9619

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#### FROM TO LITHOLOGICAL DESCRIPTION

concordant felsic dyke from 66.97-68.15. Porphyritic with approximately 60% zoned? Potassic to sodic feldspar phenocrysts to 5mm diameter. 5-7% acicular dark-green to black amphibole to 1 x 5mm. Qtz if present occurs only within fine to aphantic groundmass. Broadley syenitic.

ALTERATION: 1-2% fine Py. Trace Cp, Sp in contorted qtz stringer at 25-30 to CA at 65.55. Trace-1% fine Py.

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COMMENTS: Contacts not appreciably chilled but inclusion of wallrock 10cm long occurs at 68.0.

69.02 to 69.38: Crosscutting fine gabbroic dyke.

ALTERATION: Mod-strong pervasive calcite alteration. Weak chloritization. 1% fine Py. 5-7% fine disseminated Py, and tourmaline present within 3-4cm wide crosscutting qv at 69.98 and within silicified material over lowermost 15-20cm of interval.

STRUCTURE: Contacts chilled, 55-60 to CA, near perpendicular to foliation at 50-55 to CA. Qv at top contact vein 65-70 to CA. Most calcite stringers foliation parallel, some folded and near CA parallel. Lower contact subconcordant, and very irregular.

75.0 to 88.0: Much less abundant biotite than from 64.42-75.0. Still contains up to 5% disseminated magnetite, and also commonly up to 20% calcite altered relic fsp phenocrysts

						ASSAY	5				
FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag pom	Pb ppm	Coppra	Ni ppm	Pt ppb	Pd ppb
69.95	70.60	0.65	60	42.000	139.000	0.200	7.000	NIL	NIL	NIL	NIL
71.22	71.82	0.60	35	52.000	154.000	NIL	NIL	NIL	NIL	NIL	NIL
74.90	75.93	1.03	5	65.000	153.000	0.200	2.000	NIL	NIL	NIL	NIL
75.93	76.70	0.77	20	54.000	127.000	0.200	2.000	NIL	NIL	NIL	NIL
93.23	93.61	0.38	2370	91.000	112.000	2.400	34.000	NIL	NIL	NIL	NIL
101.22	101.70	0.48	10	80.000	197.000	0.400	NIL	NIL	NIL	NIL	NIL

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9619

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION elongated parallel to foliation. Includes, 88.55-87.3, fine grained feldspar porphyry dyke 10-15% fine biotite. Feldspar augens evident only over lowermost 10-15cm. Probably intrusive. ALTERATION: 2-3% fine disseminated Py, 2-3 % calcite-qtz	FROM	то	WIDTH	Auppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		stringers, subparallel to foliation. Moderate-strongly pervasive Chl-calcite alteration. STRUCTURE: Foliation 55-65 throughout averaging about 60 to CA. Foliation parallel weakly chilled? contacts 55 to CA. Foliation 60-70 to CA from 88-93m.												
		88.0 to 104.0: medium grained gabbroic metavolcanics similar to interval from 43.25-48.17. Includes contaminated? intermediate-felsic dyke from 93.3-93.6. 101.4, 10-15cm wide zone of foliation parallel calcite-qtz veining. - ALTERATION: Dyke, 8-10% fine-med. grained disseminated Py.												
		STRUCTURE: Contacts at foliation parallel to subparallel 50-55 to CA.												
		102.95 to 104: Uniformly fine grained. No obvious physical contact with overlying subunit. Possibly a broad chilled margin, if gabbroic metavolcanics are primarily intrusive. - ALTERATION 2-3% fine Py. Moderate biotite alteration of wallrock. 1-2% fine disseminated Py.												

### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Znppm	Ag ppm	Pb ppm	Со ррт	Ni ppm	Pt ppb	Pd ppb
		STRUCTURE: Contacts foliation parallel 60 to CA.												
104.0 11	12.22	MAFIC-INTERMEDIATE METAVOLCANICS (Maf. Vol., Int.) -	104.10	104.64	0.54	70	240.000	240.000	0.800	6.000	NIL	NIL	NIL	NIL
		104.0-108.12, fine grained, reasonably well banded, extrusive?	104.64	105.64	1.00	185	105.000	400.000	0.600	6.000	NIL	NIL	NIL	NIL
		Mafic-intermediate metavolcanics. Medium green-brown.	108.02	108.50	0.48	NIL	51.000	NIL	NIL	NIL	NIL	70.000	NIL	NIL
		Calcite cemented hairline fractures in random orientations	108.50	109.41	0.91	5	108.000	NIL	0.300	NIL	NIL	67.000	NIL	NIL
		have chloritized margins to 5mm which crosscut and overprint	109.41	110.46	1.05	5	103.000	NIL	0.200	NIL	NIL	65.000	NIL	NIL
		biotite alteration. 105.7-106.15, shattered to brecciated,	110.77	111.50	0.73	NIL	82.000	NIL	NIL	NIL	NIL	63.000	NIL	NIL
		recemented by < 1mm calcite fracture fillings. Well fractured throughout remainder of interval. Pinkish brown tinted where brecciated. 107.0, 5-10cm wide bed of broken chert. ALTERATION: 3-4% fine-med. grained disseminated Py. Rarely as bands of disseminated grains < 1cm wide. Moderately chloritized with biotite alteration over < 1-10cm wide bands. Strong pervasive calcite alteration throughout. 8-10% Py over 10cm within chert.	111.50	111.80	0.30	10	118.000	NIL	NIL	0.300	NIL	67.000	NIL	NIL
		- STRUCTURE: Contacts and foliation 60 to CA.												
		108.12 to 112.22: Identifiable flow contact and colour change to meddark green magnetic rock. Well foliated, weakly banded. Sheared or possibly a fine fragmental from 111.5-112.22 includes tightly folded calcite veinlet over 10cm at 111.55.												

## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ASSAYS	 5					
FROM	TO	LITHOLOGICAL DESCRIPTION ALTERATION: Weakly-moderately magnetic throughout. Trace Pyrrhotite at top of unit. Trace-1% as small lenslike clusters of disseminated grains below 109.5. STRUCTURE: Contact foliation parallel 45 to CA. Foliation 60 to CA at 110, 55 to CA at 111.5.	FROM	то	WIDTH	Au ppb	Cu ppm	2n ppm	Ag ppm	Pb ppm	Coppm	Ní ppm	Pt ppb	Pd ppb	
112 <b>.</b> 22	122.80	QTZ-FSP CRYSTAL TUFF (QID, fsp, fg) - fine grained. Medium grey-green. 3-4% smmed. 1-2mm qtz eyes. Locally up to 7-8% fine fsp phenocrysts, largely altered to calcite. Locally to 5% very fine biotite. ALTERATION: 3-4% very fine disseminated Py. Locally to 7-8% over 30-50cm. STRUCTURE: Foliation 55-60 to CA. 118.45 to 119.15: Contorted zone of strong bleaching, calcite replacement, and 3-5% qtz stringers. ALTERATION: 2-3% fine Py, trace tourmaline. STRUCTURE: Bleaching crosscuts foliation averaging approx. 20 to CA.	111.80	112.26	0.46	10	94.000	NIL	NJL	NIL	WIL	68.000	NIL	NîL	
122.8	132.7	MAFIC-INTRUS. METAVOLCANICS (Maf. Vol., Intrus.) -	123.60	124.27	0.67	35	250.000	NIL	NIL	0.400	NIL	72.000	NIL	NIL	

# DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9619

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									ASSAY	s					
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
		similar to interval from 108.12-112.22. Moderately magnetic	124.27	125.58	1.31	10	144.000	NIL	NIL	0.400	NIL	74.000	NIL	NIL	
		throughout.	125.58	126.31	0.73	5	127.000	NIL	NIL	0.200	NIL	57.000	NIL	NIL	
			126.31	126.70	0.39	15	182.000	NIL	NIL	0.200	NIL	62.000	NIL	NIL	
		ALTERATION: 1-2% fine disseminated Py above 123.40.	126.70	127.48	0.78	65	235.000	NIL	NIL	1.400	NIL	69.000	NIL	NIL	
		Similar fine magnetite? 1-3% fine Po and Py from 123.4-	131.00	131.71	0.71	15	100.000	NIL	NIL	0.300	NIL	56.000	NIL	NIL	
		127.5, often concentrated within calcite +/- qtz stringers.	131.71	132.36	0.65	15	113.000	NIL	NIL	0.300	NIL	49.000	NIL	NIL	
		- STRUCTURE: Contact foliation parallel, 60 to CA. Foliation 60 to CA above 130m.													
		127.65 to 132.7: Weakly biotite altered with 1-2% < 2mm diameter calcite filled vesicles.													
		ALTERATION: Below 127.5, 1-27 % Py and Po. Trace Cp with Po in 1-2cm wide foliation parallel calcite vein at 129.2. 2-3% disseminated Po from 131.7-132.35.													
		•													
		STRUCTURE: Foliation 50-60 to CA from 132-134m.													
		Foliation 55-65 to CA from 135-141.5.													
		COMMENTS: Balsaltic in appearance.													
132.7	145.5	FINE MAFIC METAVOLCANIC (Maf. Vol., fg) -	133.67	134.46	0.79	10	195.000	NIL	NIL	0.300	NIL	45.000	NIL	NIL	
		similar to 122.8-132.7, but dark green-black. Rare	134.99	135.90	0.91	30	77.000	NIL	NIL	0.200	NIL	38.000	NIL	NIL	
		patches of disseminated to semi-massive Po, occur as	135.90	136.72	0.82	40	130.000	NIL	NIL	0.200	NIL	46.000	NIL	NIL	
		small lenses/clusters to 1x 3mm usually, but not always,	137.45	137.83	0.38	10	149.000	NIL	NIL	0.500	NIL	46.000	NIL	NIL	
		associated with early? fractures.	139.07	139.65	0.58	5	143.000	NIL	NIL	0.200	NIL	51.000	NIL	NIL	

## DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9619

60.0W	70		ED ON	то	UINTH	1	Cu	70 000	ASSAY	Dh nom	Co. 000	Nionm	Dt oph	Dd oob
FROM	10	LITHOLOGICAL DESCRIPTION	170 45	1/0 77	0 49	AU PPO	170.000	Zn pps	Адрран NTI	0 200	соррні мті	50,000	е рро	Рарро
			139.03	140.33	0.00	NIL	122 000	MIL	NTL	0.300	NIL	48 000	N 1 L	N 1 L
		ALTERATION: 1-5% disseminated Po, trace Up, Py.	141.00	142.00	0.40	MIL 1E	122.000	NIL	MIL	NIL	NIL	50.000	NIL	MIL
		Calcite alteration primarily restricted to tractures and vesicles.	142.00	142.58	0.58	15	82.000	NIL	NIL	NIL	NIL	58.000	NIL	NIL
			143.00	145.00	1.45	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 60-65 to CA from 142-145.5m.												
		• 1/2 20 es 1/7 7, Descripto electricitation d'interviel vieb 1 29 versieles												
		142.20 to 145.7: Strongly altered interval with 1-2% vesicles.												
		Resemptes 127.05-152.7. Includes 40% catche stringers,												
		1-2% PO and Py, trace up, over 20-23cm at 145.1.												
		ALTERATION: Under manager characteristics of the												
		ALIERATION: Weakly magnetic throughout, < TA												
		disseminated Po. Strong Chi-calcite, weak diotite alteration.												
		Below 143.5, 1-2% PO and Py.												
		·												
		SIRULIURE: FOLIATION 60-65 TO UK. FOLIATION parallel												
		ventets.												
145.5	146.45	INTRUSIVE-FELSIC CRYSTAL TUFF (QID, fg-mg) -												
		fine-med. grained. Pale grey. < 10% fine mafic silicates												
		primarily Chl-biotite, minor green amphibole. Trace smmed.												
		qtz eyes. Contorted qtz-calcite veinlets over 15-20cm at												
		both contacts.												
		ALTERATION: Trace 1% Py. 1-2% fine Py.												
		STRUCTURE: Foliation 65 to CA.												

## DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ASSAYS	6					
FROM	то	LITHOLOGICAL DESCRIPTION COMMENTS: WRA 96-19-142, same as 73843, 846 but with strong pervasive calcite and biotite? alteration Somewhat "bleached" with a brownish tint.	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Plo ppm	Coppm	Nî ppm	Ptppb	Pd ppb	
146.45	149.45	FINE MAFIC METAVOLCANICS (Maf. Vol., fg) - similar to interval from 132.7-145.5, moderately magnetic, stronger alteration.	146.30 148.10	146.75 148.69	0.45 0.59	15 20	4.000 87.000	102.000 113.000	NIL NIL	NIL 3.000	NIL NIL	NIL NIL	NIL Nil	NIL NIL	
		ALTERATION: Moderate-strong Chl-calcite-biotite alteration throughout. 1-3% fine Py above 148.1. 5-7% fine Py below 148.1.													
		STRUCTURE: Foliation 55 to CA.													
149.45	162.5	INT. FELSIC QTZ EYE CRYSTAL TUFF (QID, fg-mg) - fine-med. grained. Medium-dark grey. Very weakly banded due to minor bleaching along foliation parallel to crosscutting fractures. 1-2% small qtz eyes.	161.61	162.03	0.42	15	19.000	1000.000	0.600	NIL	NIL	NIL	NIL	NIL	
		ALTERATION: 1-2% very fine disseminated Py.													
		COMMENTS: Tuff weakly fractured compared to mafic metavolcanics. Calcite fillings are very rare.													
		162.05 to 162.5: Several 2-3cm wide foliation parallel qtz-calcite veins, and foliation at lower contact sheared,													
# DIAMOND DRILL LOG

## PROPERTY: Richardson HOLE No.: NR9619

									ASSAY	s				
FROM	το		FROM	TO	WIDTH	Au pob	Cupom	Žn pomi	Ag pom	Pb pom	Co pom	Ni ppm	Ptppb	Pd ppb
		crennulated.							• 11			••		
		ALTERATION: Black amphibole or tourmaline present at												
		lower contact.												
		STRUCTURE: Contact, shearing 40-45 to CA. Foliation												
		60 to CA at 163m.												
				4/2 70	0.54	75	79 000	83 000					NTI	N11
165.0	201.30	FINE MAFIC METAVOLCANICS (Mat. Vol., tg) -	102.10	162.70	0.54	()	171 000	62.000	NIL	NIL	NIL	40 000	NTL	NIL
		similar to interval from 146.45-149.45, well follated, mod-strongly	107.12	100.05	0.90	WIL /5	7/5 000	NIL	0 400	NIL	NIL	71 000	NT1	NTI
		altered. Somewhat banded que to alteration. 5% 1-5mm	102.42	196.07	0.65	42	780 000	2 300	3 000	4 000	N T I	71.000 NTI	NT:	NTI
		calcite filled vesicles over such at 165.8.	186 25	187 70	1 45	84.0	500.000	2.390	1 400	4.000 N11	NTI	71 000	NTI	NTI
		-	187 70	188 05	0.35	70	650.000	NIL	1.600	NTL	NIL	86.000	NTL	NTL
		above 167 Trace Sch within foliation perallel calcite	188 05	188 03	0.99	15	395 000	NTI	0.700	NTL	NTI	64.000	NTL	NIL
		above for. The spin within forfactor parallel calcule $\frac{1}{2}$	100.05	100.75	0.00	.,	\$751000					•••••		
		nresent over 30cm at 166m Moderate-strong Chi-												
		hintite-calcite												
		STRUCTURE: Foliation 50-60 to CA from 164-184m.												
		- 186.75 to 188.5: Several relatively coarse grained, 30cm												
		intervals with "fresh" igneous texture. Subequal amounts												
		of amphibole, after pvx?, and fine fsp-rich groundmass.												
		2-3% small gtz eves. Medium grained gtz gabbro at												
		187.15, could possibly be a dyke with foliation parallel												
		contacts.												

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		ALTERATION: Two < .5cm Sph filled foliation parallel												
		fractures at 186.1. < 1% Po on average, generally as												
		rare coarse grains or clustered fine dissemination.												
		191.7 to 192.05: Possible fine grained version of pyroxenitic												
		gabbro. Crosscutting non-magnetic dyke. Similar material												
		present over 30-50cm of broken core at 200.25-200.75?												
		ALTERATION: Weakly chloritized trace by												
		ALIERATION. Weakly chloritized, thate Py.												
		STRUCTURE: Foliation 55-60 to CA. Contacts at 40-45												
		to CA. Foliation 55 to CA at 199-200m. Lower contact												
		with dacites 60 to CA, foliation parallel.												
201.3	281.1	QTZ EYE DACITE CRYSTAL TUFFS (QID, fg-mg) -	201.25	201.65	0.40	15	30.000	113.000	0.200	NIL	NIL	NIL	NIL	NIL
		similar to interval 149.45-162.5. Slightly paler, with 1-2% small	201.65	202.06	0.41	80	17.000	2050.000	NIL	NIL	NIL	NIL	NIL	NIL
		qtz eyes and < 5% fine mafic silicates on average.	208.83	209.35	0.52	45	13.000	980.000	0.200	NIL	NIL	NIL	NIL	NIL
			210.90	211.35	0.45	20	29.000	2950.000	0.200	NIL	NIL	NIL	NIL	NIL
		ALTERATION: 1-3% fine disseminated Py. Two mm	247.58	248.04	0.46	190	11.000	125.000	0.500	NIL	NIL	NIL	NIL	NIL
		wide Sph filled foliation parallel fractures at 201.9.	250.42	251.50	1.08	25	8.000	113.000	NIL	NIL	NIL	NIL	NIL	NIL
			252.42	253.21	0.79	NIL	8.000	111.000	NIL	NIL	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation 55 to CA.	273.60	274.33	0.73	165	21.000	127.000	0.200	NIL	NIL	NIL	NIL	NIL
			274.33	275.10	0.77	NIL	12.000	94.000	NIL	NIL	NIL	NIL	NIL	NIL
		206.4 to 206.5: Subconcordant irregular walled qtz vein.	275.10	275.64	0.54	NIL	12.000	93.000	NIL	NIL	NIL	NIL	NIL	NIL
			275.64	276.10	0.46	NIL	8.000	101.000	NIL	NIL	NIL	NIL	NIL	NIL
		ALTERATION: Trace Py, tr tourmaline.	276.10	276.55	0.45	NIL	22.000	83.000	NIL	NIL	NIL	NIL	NIL	NIL

# DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9619

								ASSAY	s				
FROM TO	D LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cuppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nipprn	Pt ppb	Pd ppb
		276.55	277.60	1.05	25	19.000	164.000	NIL	5.000	NIL	NIL	NIL	NIL
	208.25 to 214.90: Fine-med. grained qtz-eye dacite	278.60	279.10	0.50	NIL	9.000	58.000	NIL	3.000	NIL	NIL	NIL	NIL
	tuff. 5-7% smlg. 1-5mm qtz eyes. Including, 208.25-	279.86	280.46	0.60	5	14.000	63.000	NIL	NIL	NIL	NIL	NIL	NIL
	208.75, moderately bleached. 2-3% disseminated Sph over 20-25cm.	280.46	280.89	0.43	70	111.000	730.000	0.400	NIL	NIL	NIL	NIL	NIL
	ALTERATION: 2-3% fine disseminated Py. Moderately												
	bleached over 5-50cm intervals. Trace Sph locally along												
	fractures or as foliation parallel wisps, 1 x 3-5mm.												
	214.90 to 218.7: Similar to interval from 201.3-208.25.												
	Fine, few eyes, 5-10% Chl +/- amphibole. Gradual increase												
	in grain size and qtz eye abundance to 3-4%.												
	·												
	ALIERATION: 2-3% fine disseminated Py. Trace Spn												
	at 215.2. Lontacts weakly pleached.												
	· 218 7 to 230 36: Otz-fen nornhvry intrusive? Med -dark grov												
	10-15% fine metic silicates primarily emphibile 3-4%												
	smmed. sized atz eves Commonly 1-3% small fsp phenocrysts												
	locally to 5% over 10-15cm includes 223 5-227 0 spotted												
	with 10% k-spar, after Ca-Na-fsp?, "phenocrysts" to 2 x 4mm												
	often as lenticular aggregates, rather than single crystals.												
	227.0-230.36 7-10% fsp phenocrysts, greenish-white.												
	Fractured with mon wide bleaching as is remainder of unit.												
	· · · · · · · · · · · · · · · · · · ·												
	ALTERATION: 1-3% fine disseminated Py. Moderately-												
	strongly fractured, most subparallel to foliation, with mm												

# DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9619

								ASSAY	s				
FROM TO	LITHOLOGICAL DESCRIPTION wide bleaching, 4-8/30cm. 223.5-227.0, strong pervasive k-spar alteration from 224.75-225.10, with weak Chl-epidote- sausserite. Moderate pervasive calcite alteration throughout. 221.0-230.36, fsp phenocrysts strongly sausseritized. Weak calcite alteration of groupdmass.	FROM	то	WIDTH	Au ppb	Сиррт	Zn ppm	Ag ppm	Pb ppm	Coppm	Ni ppm	Pt ppb	Pd ppb
	STRUCTURE: Foliation 50 to CA. Contact bleached over 1-2cm, 50-55 to CA.												
	230.36-: Fine-med. grained qtz-fsp crystal tuffs. 2-3% small, rare large qtz eyes. 1-5% fine fsp crystals. Mod-strongly fractured foliation parallel to subparallel, with < 1cm bleaching. Crosscutting bleached on mm scale only. Contorted 4cm wide qtz-Py stringer almost CA parallel over 40cm at 247.8. ALTERATION: 2-3% fine disseminated Py on average, to 5-7% over < 30cm intervals. K-spar alteration present along most fractures from 237.5-243.0. Strong irregular shaped bleaching over 15-20cm appears related to veining. 5-7% Py over interval.												
	STRUCTURE: Veining fracture controlled, does not disrupt foliation. 251.3 to 254.1: Weak-moderate pervasive bleaching with a greenish tint. 1-2% qtz stringers to 1-2cm, generally crosscutting. Includes 3cm wide crosscutting fine												

# DIAMOND DRILL LOG

## PROPERTY: Richardson HOLE No.: NR9619

									ASSAY	s					
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Ni ppm	Pt ppb	Pd ppb	
		ALTERATION: Chlorita, como apidate present along													
		fractures fine Chl +/- enidete colours bleaching greenish													
		Some silicification present $4-57$ fine by on average													
		Some strict theatton present. 4 3% time ry on average.													
		STRUCTURE: Enligtion 50-55 to CA Dyke contacts													
		peer perpendicular to foliation 55 to CA													
		266.4 to 267.2: Crosscutting fine-med, grained mafic													
		dyke. Gabbroic in appearance with 20-30% fine fsp. Largely													
		replaced by calcite.													
		ALTERATION: Moderate-strong Chl-calcite alteration.													
		Trace Py.													
		STRUCTURE: Foliation 50-55 to CA from 255-265.													
		Both contacts 45-50 to CA, perpendicular to foliation.													
		•													
		272.25-: Trace garnet present. 2-3% fine garnet above 274.													
		Trace med., 1-2mm, sized garnet below 274 to end of interval.													
		ALTERATION: 2-3% fine disseminated Py.													
		275.5 to 281.1: Approx. 20% vein qtz, most as foliation													
		parallel to subconcordant 10-15cm wide veins. Exception													
		being fracture controlled veins at < 20 to CA from 279.95-													
		280.75. Fracture controlling "footwall" contact extends													
		beyond vein, Contains 1 x 5cm seam of Sph with qtz at lower													

DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Co ppm	Ní ppm	Pt ppb	Pd ppb	
		contact 281.1.													
		ALTERATION: Veins contain more chlorite, trace tourmaline.													
		Trace-1% Py. Wallrock weakly bleached with very minor													
		silicification. Trace Po, minor epidote-calcite at 278.8.													
		STRUCTURE: Foliation vein contacts 50-60 to CA.													
281 1	288 95	MAFIC-INT METAVOLCANIC (Mef. Vol. Intrus.) -	280.89	281.20	0.31	70	170,000	3900,000	0.700	NIL	NIL	NIL	NIL	NIL	
20111	200.75	fine grained Banded due in part to shearing/alteration?	281.20	281.80	0.60	20	171.000	670.000	0.600	NIL	NIL	NIL	NIL	NIL	
		Dark grev to black. Trace gtz eves, fsp crystals in places.	281.80	282.20	0.40	10	131.000	460.000	0.500	NIL	NIL	NIL	NIL	NIL	
		Weakly to moderately magnetic. Resembles interval from	282.20	282.46	0.26	115	63.000	235.000	0.400	3.000	NIL	NIL	NIL	NIL	
		104-112m somewhat, but darker, more banded, with more	282.46	283.03	0.57	5	48.000	186.000	0.400	2.000	NIL	NIL	NIL	NIL	
		sulphides.	283.03	283.90	0.87	20	110.000	390.000	0.700	NIL	NIL	NIL	NIL	NIL	
		•													
		ALTERATION: Trace garnet. 3-5% disseminated Py below													
		284.75. Disseminated to weakly banded. Up to 1/2 the sulphide													
		being Po over 10-30cm intervals.													
		•													
		STRUCTURE: Contact gradational, main change across a													
		vein at 281.1													
		• 													
		201.1 to 204./3: Well mineralized interval with qtz veins													
		and intense bleaching over 200m at 207.1 and from 202.4-202.73.													
		ALTEDATION: 5.77 Dy and Do on average with 30-60%													
		disseminated Py over 10cm at 282.3.													

# DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

									ASSAY	S				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nippm	Pt ppb	Pd ppb
		STRUCTURE: Foliation 55 to CA. Vein contacts approx. 30 to CA subparallel to foliation. Contact foliation parallel abrupt.												
		COMMENTS: 284.75-288.95, cm scale med. grey bands, may be ash tuff beds.												
288.95	329.1	FINE-MED. QTZ EYE CRYSTAL TUFFS (QID, fg-mg.) - resembles interval from 201.3-281.1. 3-5% small fsp phenocrysts common above 307m. 2-3% smmed. sized qtz eyes throughout. Moderately-strongly banded due to mm scale bleaching along foliation parallel fractures, and much less common crosscutting fractures. Interval includes three crosscutting altered gabbroic dykes. ALTERATION: Weak pervasive bleaching with minor silicification plus fine chlorite in places from 325.5- 329.1. Tourmaline and qtz along crosscutting fractures at 326.3, 327.0. Three gabbroic dykes all have mod- strong Chl-calcite alteration and trace Py. STRUCTURE: Foliation consistently 50-60 to CA averaging 55. Foliation 50-55 to CA at 329m. Contacts essentially perpendicular to foliation at 40-50 to CA.	325.50 326.15 326.92 328.02	326.15 326.92 328.02 329.10	0.65 0.77 1.10 1.08	15 NIL NIL	22.000 17.000 8.000 11.000	97.000 59.000 51.000 53.000	NIL NIL NIL	NIL NIL NIL	NIL NIL NIL	NJL NIL NIL	NIL NIL NIL	NIL NIL NIL
		296.75 to 297.60: Calcite tension gash fillings												

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9619

				,													
											YAZZA	s					
FROM	то	LITHO	DLOGICAL DESCRIP	TION		FROM	то	WIDTH	Au ppb	Cuppm	Zn ppm	Agppna	Pbppm	Co ppm	Ni ppm	Pt ppb	Pd ppb
		defining a late	tetonic fabric.														
		•															
		310.3 to 312.1:	Gabbroic dyke.	Similar to													
		296.75-297.6, bu	ut fresher and co	oarser. No fabric.	•												
		315.5 to 315.8:	Midway between I	previous two dvkes													
		in degree of all	teration. Weak	foliation parallel	to												
		contacts approx.	. 45 to CA. End	of hole.													
		DO	N-HOLE SURVEY D	ATA													
		DEPTH	INCLINATION	BEARING													
		4.90	-75.00														
		84.12	-74.00	1.00													
		145.08	-73.00	4.00													
		206.04	-72.50	2.00													
		267.00	-72.00	4.00													
		327.96	-71.00	6.00													
		329,10	-71.00														

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9620 Collar Eastings: -2000.00 Collar Northings: 250.00 Collar Elevation: 5.00 Grid: Rich Drill contractor, Ultra Mobile Diamond Drilling.

Collar Inclination: -55.00 Grid Bearing: 0.00 Final Depth: 172.21 metres Logged by C.A.Wagg

Logged by: Date: 27/03/96-29/03/96 Down-hole Survey: Acid Test DDH drilled on claim Lot7,ConII, Richard

									ASSAY	s				
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nippm	Pt ppb	Pib pipib
0	18.40	OVERBURDEN (OB) - Casing.												
18.4	126.6	017 FYF DACITE CRYSTAL THEF (010 fg-mg) -	18 40	18,80	0.40	30,000	23.000	114.000	NIL	2.000	NIL	NIL	NTL	NTL
		fine-med. grained. Pale grey weakly-moderately banded with	20.95	21.95	1.00	35.000	9.000	73.000	0.400	4,000	NIL	NIL	NIL	NIL
		variable density micaceous shear/fracture planes, and	33.95	34.85	0.90	50.000	15.000	105.000	0,400	2.000	NIL	NIL	NIL	NIL
		in places closely spaced < 1-2cm wide calcite-ctz stringers	34.85	35.40	0.55	5.000	7.000	75.000	0.400	4.000	NIL	NIL	NIL	NIL
		parallel to foliation. 3-5% smlg. 1-5mm gtz eves.	38.71	39.49	0.78	25.000	23,000	82.000	0.600	4.000	NIL	NIL	NIL	NIL
		10cm wide foliation parallel gtz-calcite stringers at 28,50.	39,49	40.10	0.61	35.000	15.000	95.000	1.000	3.000	NIL	NIL	NIL	NIL
		32.55, 36.70, over 35-40cm at 38.95 and over 40cm at	41.23	42,11	0.88	50.000	5.000	71.000	0.600	3.000	NIL	NIL	NIL	NIL
		41.45. Strongly bleached from 49.5-55.5 with patches	50.20	50,90	0.70	200.000	20.000	66.000	0.200	2.000	NIL	NIL	NJL	NIL
		of very fine recrystalized/silicified? groundmass at 51.0,	50.90	51.82	0.92	100.000	22.000	74.000	0.200	3.000	NIL	NIL	NIL	NIL
		51.7, 54.2.	51.82	52.65	0.83	35.000	33.000	80.000	0.200	NIL	NIL	NIL	NIL	NIL
		•	53.20	54.08	0.88	95.000	14.000	76.000	0.200	2.000	NIL	NIL	NIL	NIL
		ALTERATION: 2-5% fine disseminated Py. Mod-strongly	54.08	54.85	0.77	35.000	28,000	91.000	0.200	2.000	NIL	NIL	NIL	NIL
		bleached, sericitized with weak pervasive calcite alteration.	58.10	58.80	0.70	10.000	15.000	73.000	0.200	34.000	NIL	NIL	NIL	NIL
		Trace Py, 5-10% at 36.70. Trace 1% Py at 38.95, 1-2%	61.91	62.65	0.74	135.000	16.000	84.000	0.200	3.000	NIL	NIL	NIL	NIL
		fine Py at 41.45.	64.97	65.61	0.64	70.000	11.000	98.000	0.200	5.000	NIL	NIL	NIL	NIL
		•	67.06	67.98	0.92	40.000	12.000	101.000	0.200	6.000	NIL	NIL	NIL	NIL
		STRUCTURE: Foliation at 18.4 approx. 10 to CA,	67.98	69.19	1.21	30.000	18.000	116.000	0.200	NIL	NIL	70.000	NIL	NIL
		45 to CA at 19.5, 60-70 to CA at 20-28, 70 to CA	70.05	71.10	1.05	45.000	8.000	125.000	0.300	2.000	NIL	67.000	NIL	NIL
		from 28-30m. Foliation 60-70 to CA from 30-49m,	72.24	73.44	1.20	35.000	8.000	101.000	0.200	2.000	NIL	65.000	NIL	NIL
		40-50 to CA from 50.5-51.0, 60 to CA from 50.25-	73.44	74.11	0.67	50.000	9,000	80.000	0.600	NIL	NIL	63.000	NIL	NIL

#### DIAMOND DRILL LOG

#### PROPERTY: Richardson HOLE No.: NR9620

Page 2

									ASSAY	 s					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pbppm	Соррт	Ni ppm	Pt ppb	Pb ppb	
		70m. 65-70 to CA from 71-82, 70-75 to CA from 83-	76.55	77.50	0.95	45.000	20.000	73.000	0.400	0.300	NIL	67.000	NIL	NIL	
		87, 65-70 to CA from 88-96, 70-75 to CA from 97-103,	84.07	84.68	0.61	45.000	17.000	120.000	0.400	3.000	NIL	68.000	NIL	NIL	
		and 60-70 from 104-105.5m.	94.00	95.13	1.13	60.000	8.000	71.000	NIL	0.400	NIL	72.000	NIL	NIL	
			100.20	101.25	1.05	10.000	12.000	65.000	0.200	2.000	NIL	74.000	NIL	NIL	
		Below 75.0m: Banding very weak to absent. 84.45, 7cm wide	104.69	105.50	0.81	90.000	197.000	145.000	0.400	0.200	NIL	57.000	NIL	NIL	
		concordant qtz-calcite vein, trace Py.	105.50	105.89	0.39	15.000	11.000	106.000	NIL	0.200	NIL	62.000	NIL	NIL	
			105.89	106.25	0.36	280.000	10.000	40.000	0.600	1.400	NIL	69.000	NIL	NIL	
		ALTERATION: 1-3% very fine disseminated Py.	106.25	107.25	1.00	90.000	7.000	84.000	NIL	0.300	NIL	56.000	NIL	NIL	
		Mod-strong pervasive sericitization.	114.90	115.87	0.97	15.000	20.000	74.000	NIL	0.300	NIL	49.000	NIL	NIL	
			121.01	121.80	0.79	10.000	4.000	99.000	0.400	0.300	NIL	45.000	NIL	NIL	
		104.70 to 105.51: Fsp phenocrysts up to 2 x 2mm, comprise	121.80	122.38	0.58	30.000	10.000	94.000	NIL	0.200	NIL	38.000	NIL	NIL	
		3-4% of unit, as do smmed. sized qtz eyes. Medium	122.38	123.51	1.13	40.000	7.000	83.000	NIL	0.200	NIL	46.000	NIL	NIL	
		grey-no bleaching.	123.51	124.40	0.89	10.000	11.000	78.000	NIL	0.500	NIL	46.000	NIL	NIL	
			124.40	125.44	1.04	5.000	15.000	69.000	NIL	0.200	NIL	51.000	NIL	NIL	
		ALTERATION: 2-3% fine disseminated Py.	125.44	126.52	1.08	NIL	NIL	66.000	NIL	0.300	NIL	50.000	NIL	NIL	
		105.65 to 106.15: Irregular walled qtz vein.													
		ALTERATION: Minor calcite, with chlorite clusters													
		along top contact, strong sericitization of "footwall"													
		contact over 10-15cm. 4-5% Py, concentrated near													

lower contact.

STRUCTURE: Both contacts crosscutting, lower contact folded and foliation kinked over 20cm. Top averages 25 to CA.

106.15 to 126.6: Fine qtz eye dacite, weakly banded,

# DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9620

									ASSAY	s				
FROM	то	LITHOLOGICAL DESCRIPTION with only 1-2% generally small qtz eyes on average. "Inclusion" at 126.35 of intrusive QFP. Faulted into position? Irregular contact crosscuts foliation.	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Соррт	Nî ppm	Pt ppb	РЬ ррб
		ALTERATION: Trace-1% fine Py. Moderately bleached, sericitized. Below about 121.75 strongly bleached to a beige colour-Rhyolitic in appearance. Weakly silicified below 115. Moderately silicified below 117m. Trace-1% tourmaline along foliation planes and resealing foliation parallel hairline fractures. Trace Py below 115m. STRUCTURE: Foliation variable 60-65 to CA above 115m. Foliation 70-75 from 115-126.5. Foliation at 126.5 75 to CA.												
126.6	137.30	POTASSIC QTZ FSP PORHYRY (Potassic QTZ FSP Porph.) - intrusive? Fine grained pinkish-grey. 3-5% smlg. <5mm qtz eyes. 3-4% smmed. white fsp phenocrysts, subhedral. Locally to 10% over 20cm. Includes several lithic fragments of wallrock inclusions generally < 1cm. One subrounded fragment just below a second intrusive contact at 127.85. Two angular fragments at 132.8, and one 1.5 x 5cm apparently flattened at 133.9.	128.30 133.55	129.00 134.24	0.70 0.69	NIL 10.000	NIL NIL	81.000 70.000	NIL NIL	NIL NIL	NIL NIL	68.000 58.000	NIL NIL	NIL NIL
		groundmass, otherwise dacitic in appearance.												

#### DIAMOND DRILL LOG

### PROPERTY: Richardson HOLE No.: NR9620

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									ASSAY	s					
FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	то	WIDTH	Au ppb	Cuppm	Zn ppm	Ag ppm	Pb ppm	Co ppm	Nippπ	Pt ppb	Pib ppib	
		STRUCTURE: Intrusive contact planar, crosscuts foliation at													
		40 to CA. Well foliated internal contact at 127.85, 70 to CA,													
		non-parallel to country rock foliation. Lower contact difficult													
		to pinpoint, probably subconcordant at 137.3.													
137.3	172.21	QTZ EYE DACITE CRYSTAL TUFF (QID, fg-mg) - with fsp.	137.45	138.20	0.75	NIL	NIL	104.000	NIL	NIL	NIL	NIL	NIL	NIL	
		phenocrysts and rare mafic lithic fragments. Fine-med.	139.64	140.31	0.67	15.000	NIL	105.000	NIL	NIL	NIL	NIL	NIL	NIL	
		grained. Light-med. grey. 3-5% small to occasionally	145.59	146.57	0.98	10.000	NIL	87.000	NIL	3.000	NIL	NIL	NIL	NIL	
		large qtz. eyes. 3-5% small-med. white fsp phenocrysts	154.39	154.96	0.57	75.000	7.000	53.000	0.400	NIL	NIL	NIL	NIL	NIL	
		on average, commonly 5-7% within the darker coloured	155.18	155.58	0.40	15.000	40.000	148.000	0.400	NIL	NIL	NIL	NIL	NIL	
		intervals. Rare mafic lithic fragmments ranging in size from	159.13	159.74	0.61	NIL	NIL	105.000	NIL	NIL	NIL	60.000	NIL	NIL	
		< 1 x 1cm to 1 x 2-3cm, generally subangular.	169.43	169.77	0.34	70.000	5.000	68.000	0.400	2.000	NIL	71.000	NIL	NIL	
		•	169.77	170.09	0.32	15.000	4.000	71.000	NIL	4.000	NIL	NIL	NIL	NIL	
		ALTERATION: Weakly-mod. sericitized throughout,													
		trace 1% Py. Weakly sheared and k-spar altered													
		above 137.8. Very weak k-spar alteration from													
		139.60-140.2.													
		STRUCTURE: Foliation 60-70 to CA above 142.5.													
		70 to CA from 143-151m. Variable from 65-75 to													
		CA from 151-155m.													
		145.9: 2-3cm wide qtz-calcite veinlet.													
		ALTERATION: 5-7% masses of fine tourmaline, trace Py.													

#### DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9620

									ASSAY	5				
FROM	то	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	Pb ppm	Со ррт	Nî ppm	Pt ppb	Pb ppb
		STRUCTURE: Vein at 25 to CA.												
		154.40 to 154.95: Sheared chlorite sericite altered interval												
		with 40-45% foliation parallel qtz-calcite veinlets.												
		STRUCTURE: Shearing 60-70 to CA. Foliation 70-75												
		to CA below 155m.												
		155 to 159; Least felsic interval. 3-4% gtz eyes. 3-5%												
		small-med, fsp phenocrysts. 30-40%? fine mafic silicates,												
		borderline andesitic.												
		169.5 to 170: Concordant gtz-calcite vein.												
		· · · · · · · · · · · · · · · · · · ·												
		ALTERATION: 5% tourmaline occurring mostly between												
		large masses of calcite and qtz. Trace Py. Strong sericite-												
		Chl alteration of sheared wallrock inclusions.												
		STRUCTURE: Foliation below vein 60-70 to CA, averaging												
		between 65 and 70 to CA.												
		170 to 172.21: Atz-fsp dacite crystal tuff. 15-20% small-med.												
		sized phenocrysts, some angular. Fsp generally smaller and												
		more abundant than gtz eves. Several 1 x 2cm mafic lithic												
		fragments at 171.10, 172.21, end of hole.												
		· · · · · · · · · · · · · · · · · · ·												
		ALTERATION: Feldspar phenocrysts calcite altered. Weak												
		Chl-sericite alteration of fine groundmass.												
		and denote acceleration of this Brownings -												

DIAMOND DRILL LOG

PROPERTY: Richardson HOLE No.: NR9620 Page 6 ASSAYS FROM TO LITHOLOGICAL DESCRIPTION FROM TO WIDTH Auppeb Cupper Znppen Agppen Popper Copper Nipper Ptppb Poppeb . STRUCTURE: Vein at 169.5-170.0, occurs along top contact of unit. DOWN-HOLE SURVEY DATA DEPTH INCLINATION BEARING 20.42 -53.00 96.64 -50.00 172.21 -47.00



Ministère du Développement du Nord et des Mines

# Rapport sur les travaux exécutés après l'enregistrement d'un claim

Loi sur les mines

Nº de transaction

W9610. 00056

\$

ERLIS

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à la correspondance toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Miles, 159, 4<sup>e</sup> étage. Sudbury (Ontario) P3E 6A5: téléphone : (705) 670-7264. Adress 4<sup>e</sup> étage, Sudbury (Ontario) P3E 6A5; téléphone ; (705) 670-7264.

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Dir	ectives				~ ~	ır connaître	les direct	ives de tépôt c	les travaux
	52D	016SE0001 W961	0.00056 RICHARDSON		900	orts techniqu claims ayan	ues et de It fait l'obj	s cartes. jet des travaux.	
Titu	laire(s) enregistré(s)						N	° de client	
	~	VU, 23	co RESC	JACES	6100	N <sup>e</sup>		1768	66
Adr	esse						N	° de téléphone	
	9	09	THE CAST	MALL	2013	Bicoke		416 626	-0470
Div	ision des mines	,	· · · · · · · · · · · · · · · · · · ·	Canton/secteur			N	° de plan M ou G	
		Kene	RA	RICH	+AROSO-	J / 78	117	MZII	FL3E37
Di d' de	ates exécution d es travaux	du:	March 1	1996	â	au: Man	人 31,	1996	
Tra	vaux exécutés	; (cocher ι	In seul groupe de	travaux)					
	Groupe de trav	vaux				Genre		· · · · · ·	
	Levé géotechni	que							
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	Réhabilitation								

	Réhabilitation							
	Autres travaux autorisés							
	Essais							
×	Valeur transférée de la réserve	Transfer	of credits	<i>t</i> ~	claim S	is TAIT	- TWP	
Tot	al des travaux d'évaluati	on réclamé sur l	e relevé des frais ci-ann	exé	× 2	11,800		\$

Nota : Le ministre peut rejeter une partie ou la totalité des travaux d'évaluation présentés pour obtenir des crédits d'évaluation si le titulaire enregistré ne peut vérifier les dépenses réclamées sur le relevé des frais dans les trente jours suivant une demande de vérification.

Les personnes et la compagnie d'arpentage qui ont exécuté les travaux (donner le nom et l'adresse de l'auteur du rapport)

Nom	Adresse								
PAUL JONES	RRZ OFFLAREROAD ENCON								
- -									

(joindre une annexe au besoin)

# Certification d'intérêt bénéficiaire \* Voir la note n° 1 au verso

Je certifie qu'au moment où les travaux ont été exécutés, les claims dont il est question dans le présent rapport étaient enregistrés au nom de leur titulaire actue ou détenus à titre bénéficiaire par l'actuel titulaire enregistré.	Date	Titulaire enregistré ou représentant (Signature)
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------	--------------------------------------------------

# Certification du rapport sur les travaux exécutés

Je certifie que j'ai une connaissance directe des faits exposés dans le présent rapport, pour avoir exécu avant ou après leur achèvement. Je certifie aussi que le rapport ci-annexé est exact.	uté les travaux ou en avoir constaté l'exéc
Nom et adresse du certificateur	· · · · · · · · · · · · · · · · · · ·
PRUL PIOMAN CONSULTANT TO NUINS	( U
N° de téléphone Date Certifié par (signature)	20
416626-0470 April 12/96	of st.
Réservé au ministère	
Valeur totale des crédits enregistrés Date d'enregistrement Registrateur de claibs	Cachet recu
Date d'envoi de l'avis de modification	- APH151
May 31, 1796	789101112
0241 (05/91)	4



crédits que vous réclamez dans le présent rapport peuvent être réduits. Afin de diminuer les conséquences défavorables de telles tions, veuillez indiquer l'ordre dans lequel vous désirez au'elles soient appliquées à vos claims. Veuillez cocher () l'une des opuivantes :

Les crédits doivent être réduits en commençant par le dernier claim sur la liste.

.es crédits doivent être réduits également entre tous les claims figurant dans le présent rapport.

es crédits doivent être réduits selon l'ordre donné en annexe.

'avez pas choisi d'option, la première sera appliquée.

xamples d'intérêts bénéficiaires : cessions non enregistrées, ententes sur des options, protocoles d'entente, etc. relatifs ux claims.

es travaux ont été exécutés sur un terrain faisant l'objet de lettres patentes ou d'un bail, veuillez remplir ce qui sui

e titulaire enregistré possédait un intérêt bénéficiaire sur le objet de lettres patentes ou d'un bail, au moment où les xécutés.	Signature	Date Bril 12/96

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1 . Credits are to be cut back starting with the claim listed last, working backwards.

2. Credits are to be cut back equally over all Jaime contained in this report of work.

3. Credits are to be cut back as priorized on the attached appendix.

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In the event that you have not specified your choics of priority, option one will be implemented.

ite 1: Examples of beneficial interest are sitescen led transfers, option agreements, memoranifsiti of agreements, etc., with respect to the mining claims.

ite 2: If work has been performed on patented in ledged land, plaque complete the followings

cartify that the recorded holder had a beneficiel interest in the setenad Signature affects Determined in the setenad at the time the work was performed.



Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark ( $\nu$ ) one of the following:

1. Credits are to be cut back starting with the claim listed last, working backwards.

2. Credits are to be cut back equally over all claims contained in this report of work.

3. Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

# Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

				1	
	I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature		T)	Date April 121
Ì			τ	7	

# NOTES

400' surface rights reservation along the shores of all lakes and rivers.

# This Township lies within the Corporation of the Township of Chapple.

(RI) W-K-43/93 SR&MR JUNE 4/93

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ROW-K-8/96 NWR MRO JAN. 26/96 195150-TO FILE # 0-K-13/96 NWR MRO MAY 9/96 195150.





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				fg fol gal	fine grained foliated galena		
		· ·		gar intrus int k alt	garnet intrusive intermediate potassic alteration		
				kom maf mag	komatiite mafic magnetite		
				mg-cg MUM OVB poss	medium-coarse grained mafic-ultramafic overburden possibly		
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-225			- 2504	Au asp bx chl-biot contam cpy def fel fg fol gal	goid arsenopyrite breccia chlorite-biotite contaminated chalcopyrite deformed felsic fine grained foliated galena	-225
-250			tafInt. Vol., sag., py	gai gar intrus int k alt kom maf mag mg-cg MUM	garnet intrusive intermediate potassic alteration komatiite mafic magnetite medium-coarse grained mafic-ultramafic	-250
-275			- 3000	OVB poss porph py QFP QID QV sap sed tour tr	overburden possibly porphyritic pyrite quartz feldspar porphyry quartz eye dacite quartz vein saprolite sedimentary tourmaline trace	-275





-125					-125
		- 1500			
-150		NAM			-150
		HUM. FS. PU.P.			
-175		Tuff/98d pyritic - 2008 Dill Tuff/98d pyritic Discrete ten T Tuff/98d Tuff/98d Tuff/98d	it ic nr tic		-175
-200		Int.	EF Intrue.	Abbreviation amph am Au gol asp ars bx bre chl-biot chl contam cor	nphibole Id eenopyrite eccia lorite-biotite ntaminated
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-250			aid by, sol, ger.	KomKommafmafmagmagmg-cgmgMUMmagOVBovposspoporphpopypyQIDquOVqu	afic -250 agnetite edium-coarse grained afic-ultramafic verburden ossibly orphyritic vrite hartz feldspar porphyry hartz eye dacite hartz vein -275
-275			300*		iartz vein -275





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